Welcome to STN International! Enter x:x

LOGINID: SSSPTA1752YXC

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
                Web Page URLs for STN Seminar Schedule - N. America
NEWS
NEWS
                 "Ask CAS" for self-help around the clock
     2
        SEP 01 New pricing for the Save Answers for SciFinder Wizard within
NEWS
                STN Express with Discover!
        OCT 28 KOREAPAT now available on STN
NEWS
     5 NOV 30 PHAR reloaded with additional data
NEWS
     6 DEC 01 LISA now available on STN
NEWS
        DEC 09
NEWS
     7
                12 databases to be removed from STN on December 31, 2004
        DEC 15
                MEDLINE update schedule for December 2004
NEWS
        DEC 17
                ELCOM reloaded; updating to resume; current-awareness
NEWS
                 alerts (SDIs) affected
                COMPUAB reloaded; updating to resume; current-awareness
NEWS
     10 DEC 17
                 alerts (SDIs) affected
NEWS
     11 DEC 17
                SOLIDSTATE reloaded; updating to resume; current-awareness
                alerts (SDIs) affected
                CERAB reloaded; updating to resume; current-awareness
NEWS
     12 DEC 17
                alerts (SDIs) affected
     13 DEC 17 THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB
NEWS
NEWS 14 DEC 30 EPFULL: New patent full text database to be available on STN
NEWS 15 DEC 30 CAPLUS - PATENT COVERAGE EXPANDED
NEWS 16 JAN 03 No connect-hour charges in EPFULL during January and
                February 2005
NEWS 17 FEB 25 CA/CAPLUS - Russian Agency for Patents and Trademarks
                 (ROSPATENT) added to list of core patent offices covered
                STN Patent Forums to be held in March 2005
NEWS
     18 FEB 10
NEWS 19 FEB 16 STN User Update to be held in conjunction with the 229th ACS
                National Meeting on March 13, 2005
NEWS 20 FEB 28 PATDPAFULL - New display fields provide for legal status
                data from INPADOC
     21 FEB 28 BABS - Current-awareness alerts (SDIs) available
NEWS
     22 FEB 28 MEDLINE/LMEDLINE reloaded
NEWS
     23 MAR 02 GBFULL: New full-text patent database on STN
NEWS
NEWS
     24 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS 25 MAR 03 MEDLINE file segment of TOXCENTER reloaded
            JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT
NEWS EXPRESS
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
              General Internet Information
NEWS INTER
NEWS LOGIN
             Welcome Banner and News Items
NEWS PHONE
              Direct Dial and Telecommunication Network Access to STN
NEWS WWW
              CAS World Wide Web Site (general information)
```

Enter NEWS followed by the item number or name to see news on that specific topic.

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result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 12:14:41 ON 07 MAR 2005

=> file reg

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:15:00 ON 07 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 MAR 2005 HIGHEST RN 842949-55-7 DICTIONARY FILE UPDATES: 4 MAR 2005 HIGHEST RN 842949-55-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=>Testing the current file.... screen

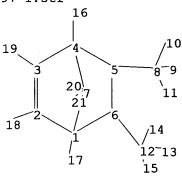
ENTER SCREEN EXPRESSION OR (END):end

=> screen 2067

L1 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\10697397-1.str



chain nodes :

8 9 10 11 12 13 14 15 16 17 18 19 20 21

ring nodes :

1 2 3 4 5 6 7

chain bonds :

1-17 2-18 3-19 4-16 5-8 6-12 7-20 7-21 8-9 8-10 8-11 12-15 12-13 12-14

ring bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6

exact/norm bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 8-9 12-13 exact bonds : 1-17 2-18 3-19 4-16 5-8 6-12 7-20 7-21 8-10 8-11 12-15 12-14

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS

L2 STRUCTURE UPLOADED

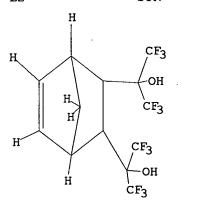
=> que L2 AND L1

QUE L2 AND L1 L3

=> d

L3 HAS NO ANSWERS

SCR 2067 L1STR L2



Structure attributes must be viewed using STN Express query preparation. L3 QUE ABB=ON PLU=ON L2 AND L1

=> s 13 sss sam

SAMPLE SEARCH INITIATED 12:15:28 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -3 TO ITERATE

100.0% PROCESSED 3 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

COMPLETE BATCH

PROJECTED ITERATIONS: 3 TO 163

PROJECTED ANSWERS: 0 TO

O SEA SSS SAM L2 AND L1 L4

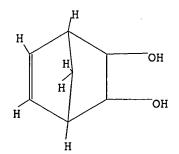
=>Testing the current file.... screen

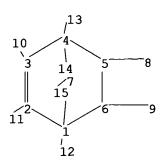
ENTER SCREEN EXPRESSION OR (END):end

=> screen 2067

L5 SCREEN CREATED

=> Uploading C:\Program Files\Stnexp\Queries\10697397-2.str





chain nodes :

8 9 10 11 12 13 14 15

ring nodes :

1 2 3 4 5 6 7

chain bonds :

1-12 2-11 3-10 4-13 5-8 6-9 7-14 7-15

ring bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6

exact/norm bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 5-8 6-9

exact bonds :

1-12 2-11 3-10 4-13 7-14 7-15

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS

L6 STRUCTURE UPLOADED

=> que L6 AND L5

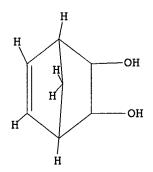
L7 QUE L6 AND L5

=> d

L7 HAS NO ANSWERS

L5 SCR 2067

L6 STR



Structure attributes must be viewed using STN Express query preparation. L7 QUE ABB=ON PLU=ON L6 AND L5

=> s 17 sss sam

SAMPLE SEARCH INITIATED 12:15:54 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 148 TO ITERATE

100.0% PROCESSED 148 ITERATIONS

SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

2231 TO 3689

PROJECTED ANSWERS:

0 TO

T.R

O SEA SSS SAM L6 AND L5

=>Testing the current file.... screen

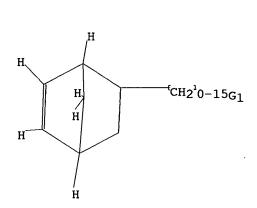
ENTER SCREEN EXPRESSION OR (END):end

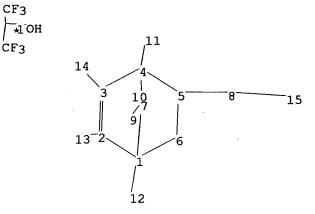
=> screen 2067

L9 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\10697397-3.str





20 19122

21

chain nodes :

 $8 \quad 9 \quad 10 \quad 11 \quad 12 \quad 13 \quad 14 \quad 15 \quad 19 \quad 20 \quad 21 \quad 22 \\$

ring nodes :

1 2 3 4 5 6 7

chain bonds :

1-12 2-13 3-14 4-11 5-8 7-9 7-10 8-15 19-20 19-21 19-22

ring bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6

exact/norm bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 8-15 19-22

exact bonds :

1-12 2-13 3-14 4-11 5-8 7-9 7-10 19-20 19-21

G1:H,F,CF3,OH,[*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:CLASS 21:CLASS

L10 STRUCTURE UPLOADED

=> que L10 AND L9

L11 QUE L10 AND L9

=> d

L11 HAS NO ANSWERS

L9 SCR 2067

L10 STR

$$\begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CH}_2 \\ \text{O}=1 \\ \text{S}1 \end{array}$$

G1 H, F, CF3, OH, [@1]

Structure attributes must be viewed using STN Express query preparation. QUE ABB=ON PLU=ON L10 AND L9

=> s 111 sss sam

SAMPLE SEARCH INITIATED 12:16:25 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -6622 TO ITERATE

15.1% PROCESSED

1000 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:

ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

127562 TO 137318 16046

CF3

CF3

PROJECTED ANSWERS:

12824 TO

50 SEA SSS SAM L10 AND L9 L12

=>Testing the current file.... screen

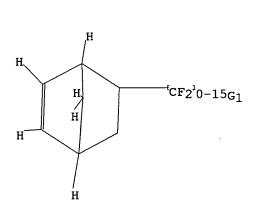
ENTER SCREEN EXPRESSION OR (END):end

=> screen 2067

SCREEN CREATED L13

=>

Uploading C:\Program Files\Stnexp\Queries\10697397-4.str



50 ANSWERS

20 19122 21

chain nodes :

8 9 10 11 12 13 14 15 19 20 21 22
ring nodes:
1 2 3 4 5 6 7
chain bonds:
1-12 2-13 3-14 4-11 5-8 7-9 7-10 8-15 19-20 19-21 19-22
ring bonds:
1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6
exact/norm bonds:
1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 8-15 19-22
exact bonds:
1-12 2-13 3-14 4-11 5-8 7-9 7-10 19-20 19-21

G1:H,F,CF3,OH,[*1]

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS

L14 STRUCTURE UPLOADED

=> que L14 AND L13

L15 QUE L14 AND L13

=> d L15 HAS NO ANSWERS L13 SCR 2067 L14 STR

$$\begin{array}{c} H \\ H \\ H \\ H \end{array}$$

G1 H, F, CF3, OH, [@1]

Structure attributes must be viewed using STN Express query preparation. L15 QUE ABB=ON PLU=ON L14 AND L13

| ПОН СF3

=> s 115 sss sam

SAMPLE SEARCH INITIATED 12:17:05 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 6622 TO ITERATE

15.1% PROCESSED 1000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 127562 TO 137318

50 ANSWERS

12824 TO 16046

L16

50 SEA SSS SAM L14 AND L13

=>Testing the current file.... screen

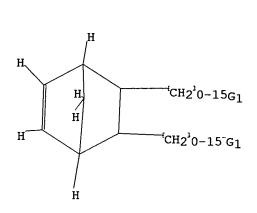
ENTER SCREEN EXPRESSION OR (END):end

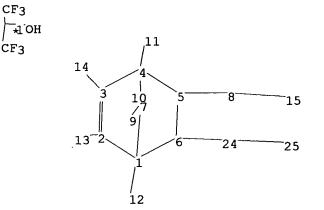
=> screen 2067

L17 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\10697397-5.str





20

chain nodes :
8 9 10 11 12 13 14 15 19 20 21 22 24 25
ring nodes :
1 2 3 4 5 6 7
chain bonds :
1-12 2-13 3-14 4-11 5-8 6-24 7-9 7-10 8-15 19-20 19-21 19-22 24-25
ring bonds :
1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6
exact/norm bonds :
1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 8-15 19-22 24-25
exact bonds :
1-12 2-13 3-14 4-11 5-8 6-24 7-9 7-10 19-20 19-21

G1:H,F,CF3,OH,[*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 24:CLASS 25:CLASS

L18 STRUCTURE UPLOADED

=> que L18 AND L17

L19 QUE L18 AND L17

=> d

L19 HAS NO ANSWERS

L17 SCR 2067

L18 STR

H
$$\begin{array}{c}
CF_{3} \\
F_{1} \\
CF_{3}
\end{array}$$

$$CF_{3} \\
CF_{3} \\
CF_{3} \\
CF_{3} \\
CF_{2} \\
CF_{3} \\
CF_{4} \\
CF_{5} \\$$

G1 H, F, CF3, OH, [@1]

Structure attributes must be viewed using STN Express query preparation. L19 QUE ABB=ON PLU=ON L18 AND L17

=> s 119 sss sam

STRUCTURE TOO LARGE - SEARCH ENDED

A structure in your query is too large. You may delete attributes or atoms to reduce the size of the structure and try again.

=> s 118 sss sam STRUCTURE TOO LARGE - SEARCH ENDED A structure in your query is too large. You may delete attributes or atoms to reduce the size of the structure and try again.

=>Testing the current file.... screen

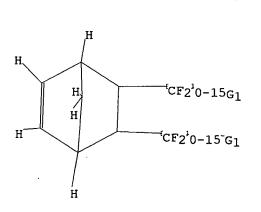
ENTER SCREEN EXPRESSION OR (END):end

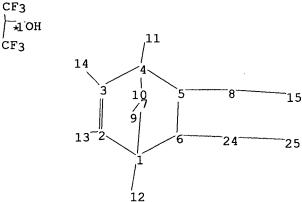
=> screen 2067

L20 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\10697397-6.str





20

21

19122

chain nodes :
8 9 10 11 12 13 14 15 19 20 21 22 24 25
ring nodes :
1 2 3 4 5 6 7

chain bonds:
1-12 2-13 3-14 4-11 5-8 6-24 7-9 7-10 8-15 19-20 19-21 19-22 24-25 ring bonds:
1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 exact/norm bonds:
1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 8-15 19-22 24-25 exact bonds:
1-12 2-13 3-14 4-11 5-8 6-24 7-9 7-10 19-20 19-21

G1:H,F,CF3,OH,[*1]

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 24:CLASS 25:CLASS

L21 STRUCTURE UPLOADED

=> que L21 AND L20

L22 QUE L21 AND L20

=> d L22 HAS NO ANSWERS L20 SCR 2067 L21 STR

$$\begin{array}{c} H \\ H \\ H \\ \end{array} \begin{bmatrix} \text{CF}_2 \end{bmatrix}_{0-1} & \\ \text{CF}_2 \end{bmatrix}_{0-1} & \\ \text{H} \\ \end{array}$$

G1 H, F, CF3, OH, [@1]

CF₃ TOH CF₃

Structure attributes must be viewed using STN Express query preparation. L22 QUE ABB=ON PLU=ON L21 AND L20

=> s 122 sss sam

STRUCTURE TOO LARGE - SEARCH ENDED

A structure in your query is too large. You may delete attributes or atoms to reduce the size of the structure and try again.

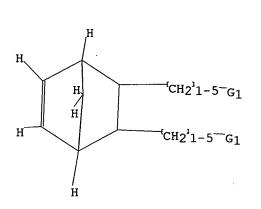
=>Testing the current file.... screen

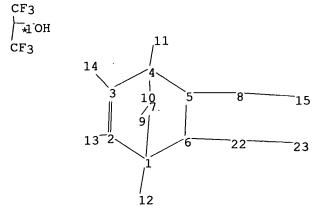
ENTER SCREEN EXPRESSION OR (END):end

=> screen 2067

=>

Uploading C:\Program Files\Stnexp\Queries\10697397-7.str





chain nodes :

8 9 10 11 12 13 14 15 17 18 19 20 22 23

ring nodes :

1 2 3 4 5 6 7

chain bonds :

 $1-12 \quad 2-13 \quad 3-14 \quad 4-11 \quad 5-8 \quad 6-22 \quad 7-9 \quad 7-10 \quad 8-15 \quad 17-18 \quad 17-19 \quad 17-20 \quad 22-23$

ring bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6

exact/norm bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 8-15 17-20 22-23

exact bonds :

1-12 2-13 3-14 4-11 5-8 6-22 7-9 7-10 17-18 17-19

G1:H,F,CF3,OH,[*1]

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 22:CLASS

23:CLASS

L24 STRUCTURE UPLOADED

=> que L24 AND L23

L25 QUE L24 AND L23

=> d

L25 HAS NO ANSWERS

L23 SCR 2067

L24 STR

18 17120 19

$$CF_3$$
 CF_3
 CF_3
 CF_3
 CF_3
 CF_3
 CF_3
 CF_3
 CF_3
 CF_3

G1 H, F, CF3, OH, [@1]

Structure attributes must be viewed using STN Express query preparation. QUE ABB=ON PLU=ON L24 AND L23 L25

=> s 125 sss sam

SAMPLE SEARCH INITIATED 12:20:42 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -5344 TO ITERATE

18.7% PROCESSED

1000 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:

ONLINE **COMPLETE**

COMPLETE BATCH

PROJECTED ITERATIONS:

102497 TO 111263

PROJECTED ANSWERS:

150 TO

L26

4 SEA SSS SAM L24 AND L23

=>Testing the current file.... screen

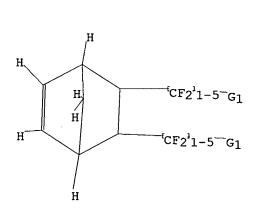
ENTER SCREEN EXPRESSION OR (END):end

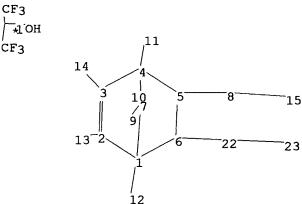
=> screen 2067

L27 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\10697397-8.str





4 ANSWERS

18 17120 19

chain nodes :

8 9 10 11 12 13 14 15 17 18 19 20 22 23 ring nodes : 1 2 3 4 5 6 7 chain bonds : $1-12 \quad 2-13 \quad 3-14 \quad 4-11 \quad 5-8 \quad 6-22 \quad 7-9 \quad 7-10 \quad 8-15 \quad 17-18 \quad 17-19 \quad 17-20 \quad 22-23$ ring bonds : 1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 exact/norm bonds : 1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 8-15 17-20 22-23 exact bonds : 1-12 2-13 3-14 4-11 5-8 6-22 7-9 7-10 17-18 17-19

G1:H,F,CF3,OH,[*1]

Match level:

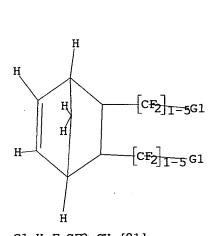
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 22:CLASS 23:CLASS

STRUCTURE UPLOADED L28

=> que L28 AND L27

L29 QUE L28 AND L27

=> dL29 HAS NO ANSWERS SCR 2067 L27 L28 STR



 HO_{Γ} CF_3

 CF_2

G1 H, F, CF3, OH, [@1]

Structure attributes must be viewed using STN Express query preparation. QUE ABB=ON PLU=ON L28 AND L27

=> s 129 sss sam SAMPLE SEARCH INITIATED 12:22:16 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 141 TO ITERATE

141 ITERATIONS 100.0% PROCESSED SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS:

ONLINE **COMPLETE** BATCH **COMPLETE** PROJECTED ITERATIONS: 2108 TO 3532

0 0 TO PROJECTED ANSWERS:

O SEA SSS SAM L28 AND L27 L30

=> FIL HCAPLUS, CAPLUS, USPATFULL

SINCE FILE TOTAL COST IN U.S. DOLLARS

> ENTRY SESSION

FULL ESTIMATED COST 5.16 5.37

FILE 'HCAPLUS' ENTERED AT 12:22:28 ON 07 MAR 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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FILE 'CAPLUS' ENTERED AT 12:22:28 ON 07 MAR 2005

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FILE 'USPATFULL' ENTERED AT 12:22:28 ON 07 MAR 2005

CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> s 14 or 18 or 112 or 116 or 126 or 130

233 L4 OR L8 OR L12 OR L16 OR L26 OR L30

=> s photoresist or resist

454502 PHOTORESIST OR RESIST

=> s 131 and 132

148 L31 AND L32 T.33

=> duplicates remove 133

DUPLICATE PREFERENCE IS 'HCAPLUS, CAPLUS, USPATFULL'

KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n

PROCESSING COMPLETED FOR L33

86 DUPLICATE REMOVE L33 (62 DUPLICATES REMOVED)

=> d 134 1-86 ibib hitstr

L34 ANSWER 1 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1

2005:123212 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 142:198529

Low polydispersity resin and preparation thereof using TITLE:

chain-transfer agents

Lee, Ting-Yu; Yu, Choa-Ying; Hsu, Meei-Yu; Wang, INVENTOR(S):

Shian-Jy; Ting, Ching; Shih, Kuo-Chen

PATENT ASSIGNEE(S):

Taiwan

SOURCE:

U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. ____ _____ ______ US 2003-714052 20050210 20031114 US 2005032997 A1 TW 2003-92121346 A 20030805 PRIORITY APPLN. INFO.:

254751-22-9P

RL: IMF (Industrial manufacture); PREP (Preparation)

(low polydispersity resin and preparation thereof using chain-transfer agents)

RN 254751-22-9 HCAPLUS

2-Propenoic acid, methyl ester, polymer with 5-butylbicyclo[2.2.1]hept-2-CN ene (9CI) (CA INDEX NAME)

CM 1 CRN 22094-81-1 CMF C11 H18

CM 2

CRN 96-33-3 CMF C4 H6 O2

0 $MeO-C-CH = CH_2$

L34 ANSWER 2 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2

ACCESSION NUMBER:

2004:740363 HCAPLUS

DOCUMENT NUMBER:

141:261444

TITLE:

Vinyl addition polycyclic olefin polymers prepared with non-olefinic chain transfer agents and their uses

in photoresist

INVENTOR(S):

Rhodes, Larry F.; Barnes, Dennis A.; Bell, Andrew; Bennett, Brian K.; Chang, Chung; Lipian, John-Henry;

Wu, Xiaoming

PATENT ASSIGNEE(S):

SOURCE:

Promerus Llc, USA PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.						APPLICATION NO.										
	WO 2004076495																
W	2004	0764	95		A3		2004	1028									
	W:	ΑE,	ΑE,	AG,	AL,	AL,	AM,	AM,	AM,	AT,	ΑT,	AU,	ΑZ,	ΑZ,	BA,	BB,	BG,
		BG,	BR,	BR,	BW,	BY,	BY,	BZ,	BZ,	CA,	CH,	CN,	CN,	co,	co,	CR,	CR,
		CU,	CU,	CZ,	CZ,	DE,	DE,	DK,	DK,	DM,	DZ,	EC,	EC,	EE,	EE,	EG,	ES,
		ES,	FI,	FI,	GB,	GD,	GE,	GE,	GH,	GM,	HR,	HR,	HU,	HU,	ID,	IL,	IN,
		IS,	JP,	JP,	KE,	KE,	KG,	KG,	KP,	KP,	KP,	KR,	KR,	ΚZ,	KZ,	ΚZ,	LC,
		LK,	LR,	LS,	LS,	LT,	LU,	LV,	MA,	MD,	MD,	MG,	MK,	MN,	MW,	ΜX,	MX,
		MZ,	MZ,	NA,	NI												
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,
							DK,										
		MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,
		GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,
		GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG								
បះ	s 2004	2291	57		A1		2004	1118		US 2	004-	7825	47		2	0040	219
IORI	TY APP	LN.	INFO	.:						US 2	003-	4489	39P		P 2	0030	221
										US 2	004-	7825	47		A 2	0040	219
HER SOURCE(S):			MAR														
	• •																
RI				man	manufacture); PRP (Properties); TEM (Technical or							or					
										_							

I

engineered material use); PREP (Preparation); USES (Uses)

(vinyl addition polycyclic olefin polymers prepared with non-olefinic chain transfer agents and their uses in photoresist)

754231-22-6 HCAPLUS RN

CN Bicyclo[2.2.1]hept-5-ene-2-ethanol, α, α -bis(trifluoromethyl)-, polymer with 2-(bicyclo[2.2.1]hept-5-en-2-ylmethoxy)ethanol (9CI) INDEX NAME)

CM 1

CRN 754231-21-5 CMF C10 H16 O2

CM

CRN 196314-61-1 CMF C11 H12 F6 O

L34 ANSWER 3 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3

ACCESSION NUMBER:

2004:252554 HCAPLUS

DOCUMENT NUMBER:

140:254085

TITLE:

Process for production of fluoropolymers for

resist

INVENTOR(S):

Araki, Takayuki; Ishikawa, Takuji; Koh, Meiten;

Toriumi, Minoru; Yamazaki, Tamio; Furukawa, Takamitsu;

Itani, Toshiro

PATENT ASSIGNEE(S):

Daikin Industries, Ltd., Japan; Semiconductor Leading

Edge Technologies, Inc.

SOURCE:

PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.				KIND DATE			APPLICATION NO.					DATE				
WO	WO 2004024787			A1 20040325			WO 2003-JP11605					20030911					
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,
		GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,
		OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,
		TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	ΤŹ,	ŪG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
PRIORITY	APP	LN.	INFO	.:						JP 2	002-	2687	39	1	A 2	0020	913
										JP 2	003-	4445	5	1	A 2	0030	221
PRIORITY	APP	GH, KG, FI, BF,	GM, KZ, FR, BJ,	KE, MD, GB, CF,	LS, RU, GR, CG,	MW, TJ, HU, CI,	MZ, TM, IE, CM,	SD, AT, IT,	SL, BE, LU, GN,	SZ, BG, MC, GQ, JP 2	TZ, CH, NL, GW,	UG, CY, PT, ML, 2687	ZM, CZ, RO, MR,	ZW, DE, SE, NE,	AM, DK, SI, SN,	EE, SK, TD, 0020	ES, TR, TG

OTHER SOURCE(S):

MARPAT 140:254085

669775-29-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(process for production of fluoropolymers for resist)

669775-29-5 HCAPLUS RN

CN Bicyclo[2.2.1]hept-2-ene, 5-[1-(ethoxymethoxy)-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-5,6,6-trifluoro-, polymer with tetrafluoroethene (9CI) (CA INDEX NAME)

CM 1

CRN 484649-18-5 CMF C13 H13 F9 O2

CM 2

CRN 116-14-3 CMF C2 F4

F F - C - F

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 4 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 4

ACCESSION NUMBER:

2004:219904 HCAPLUS

DOCUMENT NUMBER:

140:278420

TITLE:

Chemical amplification type photoresist

composition

INVENTOR(S):

Kanna, Shinichi; Mizutani, Kazuyoshi; Sasaki, Tomoya

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan

SOURCE:

U.S. Pat. Appl. Publ., 44 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004053161	A 1	20040318	US 2003-642182	20030818
US 6830871	B2	20041214		
JP 2004102264	A2	20040402	JP 2003-294268	20030818
PRIORITY APPLN. INFO.:			JP 2002-238122	20020819
TM 450005 54 55				

IT 672937-74-5P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(chemical amplification type resist composition containing)

RN 672937-74-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-ethanol, α, α -bis(trifluoromethyl)-, polymer with 5-[2-[(cyclohexyloxy)methoxy]-3,3,3-trifluoro-2-(trifluoromethyl)propyl]bicyclo[2.2.1]hept-2-ene and tetrafluoroethene (9CI) (CA INDEX NAME)

CM 1

CRN 672937-66-5 CMF C18 H24 F6 O2

CM 2

CRN 196314-61-1 CMF C11 H12 F6 O

CM 3

CRN 116-14-3 CMF C2 F4

L34 ANSWER 5 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 5

ACCESSION NUMBER:

2004:100629 HCAPLUS

DOCUMENT NUMBER:

140:154467

TITLE:

Photoresists, polymers and processes for

microlithography

INVENTOR(S):

Feiring, Andrew E.; Schadt, Frank L.

PATENT ASSIGNEE(S):

E. I. Du Pont De Nemours and Company, USA

SOURCE:

U.S. Pat. Appl. Publ., 23 pp., Cont.-in-part of U.S. Ser. No. 806,096.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

3

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.			KINI	KIND DATE		APPLICATION NO.				DATE							
US 2004023150							US 2002-108935				20020327						
	6849						2005										
WO	2000	0177:	12		A1		2000	0330	1	wo 1	999-t	J\$219	912		1	9990	921
	W:	ΑE,	AL,	AU,	BA,	BB,	BG,	BR,	CA,	CN,	CR,	CU,	CZ,	EE,	GD,	GE,	HR,
		HU,	ID,	IL,	IN,	IS,	JP,	KP,	KR,	LC,	LK,	LR,	LT,	LV,	MG,	MK,	MN,
		MX,	NO,	NZ,	PL,	RO,	SG,	SI,	SK,	SL,	TR,	TT,	UA,	US,	UZ,	VN,	ΥU,
		ZA,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM						
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,
		DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG				
US	6593	058			В1		2003	0715		US 2	001-	3060	96		2	0010	323
PRIORITY	APP	LN.	INFO	. :						US 1	998-	1015	02P]	P 1	9980	923
									,	WO 1	999-1	JS21	912	1	A1 1	9990	921
										US 2	001-	3060	96	1	A2 2	0010	323
										US 2	001-	2802	68P	1	P 2	0010	330

IT 262617-09-4P

> RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(polymers and processes for photoresists and microlithog.)

262617-09-4 HCAPLUS RN

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, polymer with CN

bicyclo[2.2.1]hept-2-ene and tetrafluoroethene (9CI) (CA INDEX NAME)

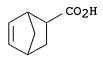
CM 1

498-66-8 CRN CMF C7 H10



2 CM

CRN 120-74-1 CMF C8 H10 O2



3 CM

116-14-3 CRN CMF C2 F4

L34 ANSWER 6 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 6

ACCESSION NUMBER:

2004:550129 HCAPLUS

DOCUMENT NUMBER: TITLE:

SOURCE:

141:114064

Positive-working resist composition

containing base compound having one or more cyclic

ether group for improved line edge roughness

INVENTOR(S):

Fujimori, Toru

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 91 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004191649	A2	20040708	JP 2002-359631	20021211
PRIORITY APPLN. INFO.:			JP 2002-359631	20021211
TT 200141 14 E				

398141-14-5

RL: PRP (Properties); TEM (Technical or engineered material use); USES

(pos.-working resist composition containing base compound having one or more cyclic ether group for improved line edge roughness)

RN 398141-14-5 HCAPLUS

> Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CN

CRN 398140-58-4 CMF C13 H20 O2

CM2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CM

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 7 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 7 ACCESSION NUMBER:

DOCUMENT NUMBER:

2004:389970 HCAPLUS

140:383121

TITLE: F2 excimer laser-sensitive positive

photoresist compositions with good coatability

and dry etchability

INVENTOR(S):

Kanna, Shinichi; Mizutani, Kazuyoshi; Sasaki, Tomoya

Fuji Photo Film Co., Ltd., Japan PATENT ASSIGNEE(S):

1

SOURCE:

Jpn. Kokai Tokkyo Koho, 65 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		- -		
JP 2004138887 PRIORITY APPLN. INFO.:	A2	20040513	JP 2002-304421 JP 2002-304421	20021018 20021018

IT 685523-13-1

> RL: TEM (Technical or engineered material use); USES (Uses) (F2 excimer laser-sensitive pos. photoresists with good coatability and dry etchability)

RN 685523-13-1 HCAPLUS

Carbonic acid, 1-(bicyclo[2.2.1]hept-5-en-2-ylmethyl)-2,2,2-trifluoro-1-CN (trifluoromethyl)ethyl 1,1-dimethylethyl ester, polymer with 1-[(trifluoroethenyl)oxy]tricyclo[3.3.1.13,7]decane (9CI) (CA INDEX NAME)

CM

CRN 685522-91-2 C12 H15 F3 O CMF

2 CM

CRN 196314-63-3 CMF C16 H20 F6 O3

L34 ANSWER 8 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 8

ACCESSION NUMBER:

2004:307727 HCAPLUS

DOCUMENT NUMBER:

140:347500

TITLE:

SOURCE:

Positive-working resists suppressing

development defects and forming precision square

profiles

INVENTOR(S):

Fujimori, Toru

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 69 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				-
JP 2004117677	A2	20040415	JP 2002-279190	20020925
PRIORITY APPLN. INFO.:			JP 2002-279190	20020925

IT 398141-14-5

RL: TEM (Technical or engineered material use); USES (Uses)
(chemical amplified pos. resists containing carbonyloxycarbonylcontaining long-chain hydrocarbons and suppressing development defects)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 9 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 9

ACCESSION NUMBER:

2004:118481 HCAPLUS

DOCUMENT NUMBER:

140:189982

TITLE:

Positive **photoresist** composition with good post exposure delay stability and **resist**

profile

INVENTOR(S):

Fujimori, Toru

PATENT ASSIGNEE(S): SOURCE:

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 76 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004045856	A2	20040212	JP 2002-204340	20020712
PRIORITY APPLN. INFO.:			JP 2002-204340	20020712

IT 398141-14-5P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (pos. photoresist composition with good post exposure delay stability and resist profile)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CM3 CRN 108-31-6 CMF C4 H2 O3

CM

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 10 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 10

ACCESSION NUMBER: 2004:753223 HCAPLUS

DOCUMENT NUMBER: 141:268557

TITLE: Positive resist composition and method of

forming a **resist** pattern using the same

APPLICATION NO.

DATE

INVENTOR(S): Sasaki, Tomoya

Fuji Photo Film Co., Ltd., Japan PATENT ASSIGNEE(S):

KIND

Eur. Pat. Appl., 80 pp. SOURCE:

CODEN: EPXXDW

DATE

Patent DOCUMENT TYPE: English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

	EP 1457819 A2 20040915 EP 2004-4961 20040303
	12 110,013
	EP 1457819 A3 20041020
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
	IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
	JP 2004279471 A2 20041007 JP 2003-67010 20030312
DDTA	
IT	756532-47-5P
	RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or
	engineered material use); PREP (Preparation); USES (Uses)
	(pos. photoresist composition for forming resist
	pattern)
RN	756532-47-5 HCAPLUS
CN	Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-,
	3,5-dihydroxytricyclo[3.3.1.13,7]dec-1-yl ester, polymer with
	1-ethenyl-3,5-bis[1-(ethoxymethoxy)-2,2,2-trifluoro-1-
	(trifluoromethyl)ethyl]benzene and 2,2,2-trifluoro-1-[4-[2,2,2-trifluoro-1
	hydroxy-1-(trifluoromethyl)ethyl]phenyl]-1-(trifluoromethyl)ethyl
	2-(trifluoromethy1)-2-propenoate (9CI) (CA INDEX NAME)
	m. 1
	CM 1

CM

CRN 756532-46-4 CMF C16 H7 F15 O3

CM 2

CRN 731861-90-8 CMF C19 H23 F3 O4

CM 3

CRN 585573-40-6 CMF C20 H20 F12 O4

$$\begin{array}{c|c} \text{CF3} & \text{CF3} \\ & & \\ & & \\ \text{F3C-C} & \\ \text{C-CF3} \\ & \\ \text{EtO-CH2-OEt} \\ \\ & \\ \text{H2C-CH} \end{array}$$

L34 ANSWER 11 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2004:292075 USPATFULL

TITLE:

Vinyl addition polycyclic olefin polymers prepared with .

non-olefinic chain transfer agents and uses thereof

INVENTOR(S):

Rhodes, Larry F., Silver Lake, OH, UNITED STATES

Barnes, Dennis A., Medina, OH, UNITED STATES Bell, Andrew, Lakewood, OH, UNITED STATES

Bennet, Brian K., Brecksville, OH, UNITED STATES

Chang, Chun, Stow, OH, UNITED STATES

Lipian, John-Henry, Medina, OH, UNITED STATES Wu, Xiaoming, Strongsville, OH, UNITED STATES

PATENT ASSIGNEE(S):

Promerus LLC (U.S. corporation)

APPLICATION INFO.:

US 2004-782547 A1 20040219 (10)

NUMBER DATE

PRIORITY INFORMATION:

US 2003-448939P 20030221 (60)

DOCUMENT TYPE: FILE SEGMENT: Utility APPLICATION

Paul M. Reznick, WEBB ZIESENHEIM LOGSDON, ORKIN & LEGAL REPRESENTATIVE:

HANSON, P.C., 436 Seventh Avenue, 700 Koppers Building,

Pittsburgh, PA, 15219-1818

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

1 NUMBER OF DRAWINGS:

8 Drawing Page(s)

LINE COUNT:

2722

75

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

754231-22-6P

(vinyl addition polycyclic olefin polymers prepared with non-olefinic chain

transfer agents and their uses in photoresist)

RN 754231-22-6 USPATFULL

Bicyclo[2.2.1]hept-5-ene-2-ethanol, α, α -bis(trifluoromethyl)-, CN

polymer with 2-(bicyclo[2.2.1]hept-5-en-2-ylmethoxy)ethanol (9CI)

INDEX NAME)

CM 1

CRN 754231-21-5 CMF C10 H16 O2

CM 2

CRN 196314-61-1 C11 H12 F6 O CMF

L34 ANSWER 12 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2004:178197 USPATFULL

TITLE:

Photosensitive polymer including copolymer of alkyl

vinyl ether and resist composition containing

the same

INVENTOR(S):

Choi, Sang-Jun, Seoul, KOREA, REPUBLIC OF

Kim, Hyun-Woo, Seongnam-city, KOREA, REPUBLIC OF

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004137363	A1	20040715	
APPLICATION INFO.:	US 2003-704977	A1	20031112	(10)
DELIGED ADDIN THE	Di	37- 770	2001 7641	EA E

RELATED APPLN. INFO.:

Division of Ser. No. US 2001-764150, filed on 19 Jan 2001, GRANTED, Pat. No. US 6673513 Continuation-in-part

of Ser. No. US 2000-576053, filed on 23 May 2000,

GRANTED, Pat. No. US 6517990

-		NUMBER DATE	
PRIORITY	INFORMATION:	KR 2000-2489 20000119 KR 2000-20603 20000419	
DOCUMENT	TYPE:	US 2000-198761P 20000421 Utility	(60)

FILE SEGMENT:

APPLICATION

JONES VOLENTINE, L.L.C., Suite 150, 12200 Sunrise LEGAL REPRESENTATIVE:

Valley Drive, Reston, VA, 20191

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

48 1

2 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT:

1116

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 350992-45-9P

(chemical amplified photoresists containing alkyl vinyl ether polymers for ArF

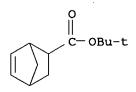
excimer laser exposure)

RN 350992-45-9 USPATFULL

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylethyl ester, CN polymer with 3,4-dihydro-2H-pyran and 2,5-furandione (9CI) (CA INDEX

CM1

CRN 154970-45-3 C12 H18 O2 CMF



CM 2

CRN 110-87-2 CMF C5 H8 O



3 CM

CRN 108-31-6 CMF C4 H2 O3



L34 ANSWER 13 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2004:31015 USPATFULL

TITLE:

Photoresists, polymers and processes for

microlithography

INVENTOR(S):

Feiring, Andrew Edward, Wilmington, DE, UNITED STATES

Feldman, Jerald, Hockessin, DE, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004023152	A1	20040205	
APPLICATION INFO.:	US 2003-437760	A1	20030514	(10)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 2001-806096, filed on 23

Mar 2001, GRANTED, Pat. No. US 6593058 A 371 of

International Ser. No. WO 1999-US21912, filed on 21 Sep

1999, PENDING

DATE NUMBER

PRIORITY INFORMATION: US 1998-101502P 19980923 (60)

US 1999-120045P 19990212 (60)

Utility DOCUMENT TYPE: APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT

RECORDS CENTER, BARLEY MILL PLAZA 25/1128, 4417

LANCASTER PIKE, WILMINGTON, DE, 19805

NUMBER OF CLAIMS: 26 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Page(s)

LINE COUNT: 1800

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 262617-09-4P, Norbornene-5-norbornene-2-carboxylic

acid-tetrafluoroethylene copolymer

(preparation and use in preparing UV photoresists for microlithog.)

RN 262617-09-4 USPATFULL

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, polymer with CN

bicyclo[2.2.1]hept-2-ene and tetrafluoroethene (9CI) (CA INDEX NAME)

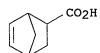
CM

CRN 498-66-8 CMF C7 H10



CM

CRN 120-74-1 CMF C8 H10 O2



CM

CRN 116-14-3 CMF C2 F4

L34 ANSWER 14 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2004:7949 USPATFULL

Polymeric compound and resin composition for TITLE:

photoresist

INVENTOR(S): Funaki, Yoshinori, Himeji-shi, JAPAN Tsutsumi, Kiyoharu, Himeji-shi, JAPAN Takaragi, Akira, Himeji-shi, JAPAN

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd. (non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2004006189 A1 20040108
US 6806335 B2 20041019

APPLICATION INFO.: US 2003-375129 A1 20030228 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-937910, filed on 19

Oct 2001, GRANTED, Pat. No. US 6552143 A 371 of International Ser. No. WO 2001-JP515, filed on 26 Jan

2001, UNKNOWN

NUMBER DATE

PRIORITY INFORMATION: JP 2000-24527 20000201

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS

CHURCH, VA, 22040-0747

NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
LINE COUNT: 3064

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 353289-59-5P

(polymeric compound for photoresist and resin composition for photoresist)

RN 353289-59-5 USPATFULL

CN Tricyclo[3.3.1.13,7]decane-1-carboxylic acid, 3-[(1-oxo-2-propenyl)oxy]-,

1,1-dimethylethyl ester, polymer with 2,5-furandione, 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-propenoate and

3a,4,7,7a-tetrahydro-4,7-methanoisobenzofuran-1(3H)-one (9CI) (CA INDEX

NAME)

CM 1

CRN 251563-20-9 CMF C18 H26 O4

CM 2

CRN 216581-76-9 CMF C13 H18 O3

3

CRN 85718-44-1 CMF C9 H10 O2

CM 4

CRN 108-31-6 CMF C4 H2 O3

0 0 0

L34 ANSWER 15 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2004:205768 USPATFULL

TITLE:

Copolymers and **photoresist** compositions

comprising same

INVENTOR(S):

Barclay, George G., Jefferson, MA, United States Caporale, Stefan J., Worcester, MA, United States

Yueh, Wang, Shrewsbury, MA, United States Mao, Zhibiao, Shrewsbury, MA, United States Mattia, Joseph, Framingham, MA, United States

PATENT ASSIGNEE(S):

Shipley Company, L.L.C., Marlborough, MA, United States

(9)

(U.S. corporation)

		NUMBER	KIND	DATE	
ľΥ	INFORMATION:	US 6777157	B1	20040817	

PATENT INFORMATION: APPLICATION INFO.:

US 2000-567814 20000509

NUMBER DATE

PRIORITY INFORMATION:

US 2000-185345P 20000226 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER:

Ashton, Rosemary

LEGAL REPRESENTATIVE: Corless, Peter F., Frickey, Darryl P., Edwards &

Angell, LLP

NUMBER OF CLAIMS:

15 1

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

O Drawing Figure(s); O Drawing Page(s)

LINE COUNT:

929

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 355395-09-4P

(photoresist composition containing photoacid labile acrylate and cyclic olefin)

RN 355395-09-4 USPATFULL

CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.13,7]dec-2-yl ester,

polymer with bicyclo[2.2.1]hept-2-ene, α -

cyclopentylbicyclo[2.2.1]hept-2-ene-2-methanol and 2,5-furandione (9CI)

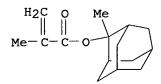
(CA INDEX NAME)

CM 1

CRN 355395-08-3 CMF C13 H20 O

CM 2

CRN 177080-67-0 CMF C15 H22 O2



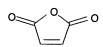
CM 3

CRN 498-66-8 CMF C7 H10



CM 4

CRN 108-31-6 CMF C4 H2 O3



L34 ANSWER 16 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 11

ACCESSION NUMBER:

2003:42890 HCAPLUS

DOCUMENT NUMBER: TITLE:

138:115058

INVENTOR(S):

Resist composition and patterning process

Kobayashi, Tomohiro; Nishi, Tsunehiro; Watanabe,

Satoshi; Kinsho, Takeshi; Nagura, Shigehiro; Ishihara,

Toshinobu

PATENT ASSIGNEE(S):

Shin-Etsu Chemical Co., Ltd., USA

SOURCE:

U.S. Pat. Appl. Publ., 35 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003013039	A1	20030116	US 2002-170345	20020614

US 6830866 **B2** 20041214 JP 2002-168143 20020610 JP 2003066612 A2 20030305 TW 2002-91113198 20020614 TW 548518 В 20030821 A 20010615 JP 2001-181079 PRIORITY APPLN. INFO.:

IT 485818-88-0P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(photoresist composition and patterning process containing)

RN 485818-88-0 HCAPLUS

CN 1,4:5,8-Dimethanonaphthalene-2-carboxylic acid, 1,2,3,4,4a,5,8,8a-octahydro-, 1-ethylcyclopentyl ester, polymer with 1,3,3a,4,7,7a-hexahydro-4,7-epoxyisobenzofuran (9CI) (CA INDEX NAME)

CM 1

CRN 479075-40-6 CMF C8 H10 O2

CM 2

CRN 279243-82-2 CMF C20 H28 O2

L34 ANSWER 17 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 12

ACCESSION NUMBER:

2003:907516 HCAPLUS

DOCUMENT NUMBER:

139:388490

TITLE:

Chemically amplified positive resists

producing defect-free patterns with square profile

INVENTOR(S):

Fujimori, Toru

PATENT ASSIGNEE(S): SOURCE:

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 60 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003330195	A2	20031119	JP 2002-279433	20020925
PRIORITY APPLN. INFO.:			JP 2002-60445 A	20020306
OMBED COURCE/C).	MADDAM	120.200400		

OTHER SOURCE(S):

MARPAT 139:388490

IT 398141-14-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(chemical amplified pos. **photoresists** containing Meldrum's acid derivs. and producing patterns with square profile)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CRN 398140-58-4 CMF C13 H20 O2

CM2

342648-11-7 CRN CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CM

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 18 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 13

ACCESSION NUMBER:

2003:735196 HCAPLUS

DOCUMENT NUMBER:

139:267983

TITLE:

Positive-working **photoresist** composition

containing polymer with fluoro-aliphatic group

INVENTOR(S): Fujimori, Toru

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 88 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

SOURCE:

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003262952	A2	20030919	JP 2002-65444	20020311
PRIORITY APPLN. INFO.:			JP 2002-65444	20020311

IT 398141-14-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pos. **photoresist** composition containing polymer with fluoro-aliphatic group)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 19 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 14

ACCESSION NUMBER:

2003:432993 HCAPLUS

DOCUMENT NUMBER:

139:28625

TITLE:

Positive photoresist compositions with

suppressed edge roughness

INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

Fujimori, Toru; Kawamura, Koichi Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 89 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003162061	A2	20030606	JP 2002-219789	20020729
PRIORITY APPLN. INFO.:			JP 2001-279708 A	20010914
OTHER COHREE(C).	MADDAM	120.29625		

OTHER SOURCE(S):

MARPAT 139:28625

IT 398141-14-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pos. **photoresists** containing sulfonimides with suppressed edge roughness)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3



CM 4

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 20 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 15

ACCESSION NUMBER:

2003:412090 HCAPLUS

DOCUMENT NUMBER:

139:14956

TITLE:

Far-UV-sensitive positive photoresists

forming fine patterns through half-tone phase-shift

masks

INVENTOR(S):

Fujimori, Toru

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 91 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003156848	A2	20030530	JP 2001-357766	20011122
PRIORITY APPLN. INFO.:			JP 2001-357766	20011122

IT 398141-14-5

RL: TEM (Technical or engineered material use); USES (Uses)

(far-UV amplified pos. **photoresists** containing F-containing N compds. and suppressing side lobe phenomena in lithog. using half-tone masks)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 21 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 16

ACCESSION NUMBER: 2003:412089 HCAPLUS

DOCUMENT NUMBER: 139:14955

TITLE: Chemically amplified far-UV-sensitive positive

resists producing defect-free patterns

INVENTOR(S): Fujimori, Toru

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 93 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003156845 PRIORITY APPLN. INFO.:	A2	20030530	JP 2001-353163 JP 2001-353163	20011119

IT 398141-14-5

RL: TEM (Technical or engineered material use); USES (Uses) (chemical amplified far-UV pos. resists containing polymers having alicyclic groups in main and/or side chains and sp. F compds.)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 22 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 17

ACCESSION NUMBER:

2003:317556 HCAPLUS

DOCUMENT NUMBER:

138:346480

TITLE:

SOURCE:

LANGUAGE:

Positive chemically amplified resist

compositions having improved edge roughness of

patterns and high sensitivity

INVENTOR(S):

Fujimori, Toru

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 96 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003122010	A2	20030425	JP 2001-318242	20011016
PRIORITY APPLN. INFO.:			JP 2001-318242	20011016

IT 398141-14-5

RL: TEM (Technical or engineered material use); USES (Uses) (pos. chemical amplified **resist** compns. containing cycloolefin polymers and having improved edge roughness of patterns and high sensitivity)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 23 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 18

ACCESSION NUMBER: 2003:754897 HCAPLUS

DOCUMENT NUMBER: 139:252537

TITLE: Positive resist composition

INVENTOR(S): Fujimori, Toru

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 89 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:

PAT	CENT :	NO.			KINI	D DA	ATE		7	APP:	LICAT	ION 1	NO.		D.	ATE	
								-	-						_		
EP	1347	335			A1	20	0030	924	F	ΞP.	2003-	6122			2	0030	318
	R:	ΑT,	BE,	CH,	DE,	DK, E	ΕS,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI, F	RO,	MK,	CY,	AL	, TR,	BG,	CZ,	EE,	HU,	SK	
JP	2003	27079	91		A2	20	0030	925	·	JP .	2002-	7456	5		2	0020	318
US	2003	2242	87		A 1	20	003	1204	Ţ	JS .	2003-	3884	80		2	0030	317
PRIORITY	APP	LN.	INFO	.:					Ċ	JP .	2002-	7456	5		A 2	0020	318

IT 398141-14-5P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pos. photoresist composition containing)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 24 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 19

ACCESSION NUMBER:

2003:241052 HCAPLUS

DOCUMENT NUMBER:

INVENTOR(S):

138:262693

TITLE:

Positive **photoresist** composition Fujimori, Toru; Kawabe, Yasumasa Fuji Photo Film Co., Ltd., Japan

PATENT ASSIGNEE(S):

Eur. Pat. Appl., 101 pp.

SOURCE: Eur. Pat. App

CODEN: EPXXDW

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT 1	NO.		KIN	D DATE		APPI	LICAT	ION 1	NO.		D	ATE	
EP 1296	190		A1	2003	0326	EP 2	2002-	2120	4		2	0020	918
R:	AT, BE,	CH,	DE,	DK, ES,	FR,	GB, GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
	IE, SI,	LT,	LV,	FI, RO,	MK,	CY, AL,	TR,	BG,	CZ,	EE,	SK		
JP 2003	167333		A2	2003	0613	JP 2	2002-	563			2	0020	107
US 2003	134225		A1	2003	0717	US 2	2002-	2440	70		2	0020	916
PRIORITY APP	LN. INFO).:				JP 2	2001-	2851	80	i	A 2	0010	919
•						JP 2	2002-	563			A 2	0020	107

IT 398141-14-5P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pos. photoresist composition containing)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CRN 342648-11-7 CMF C13 H22 O2

CM

CRN 108-31-6 CMF C4 H2 O3

CM

CRN 79-10-7 CMF C3 H4 O2

$$\begin{matrix} \text{O} \\ || \\ \text{HO-C-CH} \end{matrix} = \text{CH}_2$$

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS 5 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 25 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 20

ACCESSION NUMBER:

2003:20986 HCAPLUS

DOCUMENT NUMBER:

138:98194

TITLE:

Positive photosensitive composition

INVENTOR(S):

Fujimori, Toru

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 135 pp.

DOCUMENT TYPE:

CODEN: EPXXDW

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE -----

EP	1273	970			A2	2003	30108		EP 2	002-	1488	9		2	0020	705
EP	1273	970			A3	2004	10128									
	R:	AT,	BE,	CH,	DE,	DK, ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI, RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK		
JP	2003	02190	25		A2	2003	30124		JP 2	001-	2066	37		2	0010	706
JP	2003	0986	72		A2	2003	30404		JP 2	001-	2871	12		2	0010	920
US	2003	1861	51		A1	2003	31002	1	US 2	002-	1882	24		2	0020	703
JP	2003	08444	41		A2	2003	30319		JP 2	002-	1961	13		2	0020	704
TW	5860	52			В	2004	10501		TW 2	002-	9111	4923		2	0020	705
PRIORITY	Y APP	LN.	INFO	. :					JP 2	001-	2049	69	i	A 2	0010	705
									JP 2	001-	2066	37	Ĩ	A 2	0010	706
									TP 2	001-	2871	12		Δ 2	00109	920

IT 398141-14-5P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pos. photosensitive composition containing)

RN 398141-14-5 HCAPLUS

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CN

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7

L34 ANSWER 26 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2003:318544 USPATFULL

TITLE: Positive resist composition INVENTOR(S): Fujimori, Toru, Shizuoka, JAPAN

PATENT ASSIGNEE(S): FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2003224287 A1 20031204

APPLICATION INFO.: US 2003-388408 A1 20030317 (10)

NUMBER DATE

PRIORITY INFORMATION: JP 2002-74565 20020318

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SUGHRUE MION, PLLC, 2100 PENNSYLVANIA AVENUE, N.W.,

WASHINGTON, DC, 20037

NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
LINE COUNT: 2427

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 398141-14-5P

(pos. photoresist composition containing)

RN 398141-14-5 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl

2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

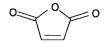
CM 1

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

108-31-6 CRN CMF C4 H2 O3



CM

79-10-7 CRN CMF C3 H4 O2

L34 ANSWER 27 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2003:306309 USPATFULL

TITLE:

Novel copolymers and photoresist compositions

comprising same

INVENTOR(S):

Barclay, George G., Jefferson, MA, UNITED STATES Caporale, Stefan J., Worcester, MA, UNITED STATES

Yueh, Wang, Shrewsbury, MA, UNITED STATES Mao, Zhibiao, Shrewsbury, MA, UNITED STATES Mattia, Joseph, Framingham, MA, UNITED STATES

NUMBER	KIND	DATE
w		
US 2003215742	A1	20031120

PATENT INFORMATION:

US 6849381 B2 20050201

APPLICATION INFO .:

US 2003-408522 **A**1 20030407

RELATED APPLN. INFO.:

Continuation of Ser. No. US 2000-567814, filed on 9 May

2000, PENDING

NUMBER	DATE				

PRIORITY INFORMATION:

US 2000-185345P 20000226 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION EDWARDS & ANGELL, LLP, P.O. BOX 9169, BOSTON, MA, 02209

LEGAL REPRESENTATIVE: NUMBER OF CLAIMS:

41 1

EXEMPLARY CLAIM:

LINE COUNT: 1057

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

TT 355395-09-4P

(photoresist composition containing photoacid labile acrylate and cyclic olefin)

RN355395-09-4 USPATFULL

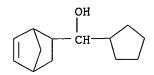
CN2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.13,7]dec-2-yl ester,

polymer with bicyclo[2.2.1]hept-2-ene, α -

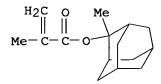
cyclopentylbicyclo[2.2.1]hept-2-ene-2-methanol and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 355395-08-3 CMF C13 H20 O



CRN 177080-67-0 CMF C15 H22 O2



CM 3

CRN 498-66-8 CMF C7 H10



CM 4

CRN 108-31-6 CMF C4 H2 O3



L34 ANSWER 28 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2003:265146 USPATFULL

Positive photosensitive composition TITLE:

INVENTOR(S):

Fujimori, Toru, Shizuoka, JAPAN FUJI PHOTO FILM CO., LTD. (non-U.S. corporation) PATENT ASSIGNEE(S):

	NUMBER	KIND DATE	
PATENT INFORMATION: APPLICATION INFO.:	US 2003186161 US 2002-188224	A1 20031002 A1 20020703	(10)
	NUMBER	DATE	
PRIORITY INFORMATION:	JP 2001-204969 JP 2001-206637 JP 2001-287112	20010705 20010706 20010920	
DOCUMENT TYPE: FILE SEGMENT: LEGAL REPRESENTATIVE:	Utility APPLICATION SUGHRUE MION, PLL		'ANIA AVENUE, N.W.

WASHINGTON, DC, 20037

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

16 1

LINE COUNT:

3188

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

398141-14-5P

(pos. photosensitive composition containing)

RN 398141-14-5 USPATFULL

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, CN polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM

398140-58-4 CRN CMF C13 H20 O2

CM 2

342648-11-7 CRN C13 H22 O2 CMF

CM3

108-31-6 CRN C4 H2 O3 CMF

CM 4

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 29 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2003:194414 USPATFULL

TITLE: Positive resist composition
INVENTOR(S): Fujimori, Toru, Shizuoka, JAPAN

Kawabe, Yasumasa, Shizuoka, JAPAN

PATENT ASSIGNEE(S): FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2003134225 A1 20030717

APPLICATION INFO.: US 2002-244070 A1 20020916 (10)

NUMBER DATE

PRIORITY INFORMATION: JP 2001-285180 20010919

JP 2002-563 20020107

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SUGHRUE MION, PLLC, 2100 PENNSYLVANIA AVENUE, N.W.,

WASHINGTON, DC, 20037

NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
LINE COUNT: 2741

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 398141-14-5P

(pos. photoresist composition containing)

RN 398141-14-5 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CRN 79-10-7 CMF C3 H4 O2

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INVENTOR(S):

L34 ANSWER 30 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2003:127900 USPATFULL

TITLE:

Novel ester compounds, polymers, resist

compositions and patterning process Nishi, Tsunehiro, Niigata-ken, JAPAN

Hasegawa, Koji, Niigata-ken, JAPAN Watanabe, Takeru, Niigata-ken, JAPAN Kinsho, Takeshi, Niigata-ken, JAPAN Nakashima, Mutsuo, Niigata-ken, JAPAN Tachibana, Seiichiro, Niigata-ken, JAPAN

Hatakeyama, Jun, Niigata-ken, JAPAN

PATENT ASSIGNEE(S):

Shin-Etsu Chemical Co., Ltd., Tokyo, JAPAN (non-U.S.

corporation)

			NUMBER	KIND	DATE	
PATENT	INFORMATION:	US	2003088115	A1	20030508	
		US	6670498	B2	20031230	
			0000 000514	- 1	00001106	, .

APPLICATION INFO.:

US 2002-288514 A1 20021106 (10)

RELATED APPLN. INFO.:

Division of Ser. No. US 2001-842007, filed on 26 Apr

2001, PENDING

	NUMBER	DATE
JP	2000-127532	20000427

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

PRIORITY INFORMATION:

MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON

BLVD., SUITE 1400, ARLINGTON, VA, 22201

NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS:

2 Drawing Page(s)

LINE COUNT:

1531

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 370089-04-6P

(preparation of ester compound and polymers for photoresist compns. and patterning process)

RN 370089-04-6 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 3-[(1-ethylcyclopentyl)oxy]-1-methyl-3-oxopropyl ester, polymer with 5-(2-bicyclo[2.2.1]hept-5-en-2-ylethyl)dihydro-2(3H)-furanone (9CI) (CA INDEX NAME)

CM 1

CRN 370089-03-5 CMF C13 H18 O2

CRN 370088-90-7 CMF C19 H28 O4

L34 ANSWER 31 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2003:112808 USPATFULL

TITLE: INVENTOR(S):

Positive photosensitive composition Kodama, Kunihiko, Shizuoka, JAPAN Sato, Kenichiro, Shizuoka, JAPAN

Sato, Kenichiro, Shizuoka, JAPAN Fujimori, Toru, Shizuoka, JAPAN

PATENT ASSIGNEE(S):

FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)

NUMBER	KIND	DATE
115 2003077540	A1	20030424

PATENT INFORMATION: APPLICATION INFO.:

US 2002-150967 A1 20020521 (10)

PRIORITY INFORMATION: JP 2001-152587 20010522
JP 2001-155897 20010524
JP 2001-159060 20010528

DOCUMENT TYPE:

Utility APPLICATION

FILE SEGMENT: LEGAL REPRESENTATIVE:

SUGHRUE MION, PLLC, 2100 PENNSYLVANIA AVENUE, N.W.,

WASHINGTON, DC, 20037

NUMBER OF CLAIMS: 14 EXEMPLARY CLAIM: 1

LINE COUNT:

2952

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 398141-14-5P

(resin; pos photoresist composition containing)

RN 398141-14-5 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CRN 342648-11-7 CMF C13 H22 O2

CM3

CRN 108-31-6 C4 H2 O3 CMF

CM 4

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 32 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2003:51645 USPATFULL

TITLE:

Novel epoxy compound having alicyclic structure,

polymer, resist composition and patterning

process

INVENTOR(S):

Hasegawa, Koji, Niigata-ken, JAPAN Kinsho, Takeshi, Niigata-ken, JAPAN Watanabe, Takeru, Niigata-ken, JAPAN Nishi, Tsunehiro, Niigata-ken, JAPAN

PATENT ASSIGNEE(S):

Shin-Etsu Chemical Co., Ltd., Tokyo, JAPAN (non-U.S.

corporation)

			NUMBER	KIND	DATE
	_				
PATENT IN	FORMATION: U	S	2003036603	A1	20030220

APPLICATION INFO.:

US 2002-167393 20020613 (10) Α1

NUMBER DATE

PRIORITY INFORMATION:

JP 2001-179593 20010614

Utility DOCUMENT TYPE: FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON

BLVD., SUITE 1400, ARLINGTON, VA, 22201

NUMBER OF CLAIMS:

EXEMPLARY CLAIM: 1
LINE COUNT: 2134

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 478946-03-1P

(oxanorbornene spiro derivative (polymers) for use in chemical amplified resists for photolithog. patterning)

RN 478946-03-1 USPATFULL

CN 1,4:5,8-Dimethanonaphthalene-2-carboxylic acid, 1,2,3,4,4a,5,8,8a-octahydro-, 1-ethylcyclopentyl ester, polymer with spiro[furan-3(2H),2'-[7]oxabicyclo[2.2.1]hept[5]en]-5(4H)-one (9CI) (CA INDEX NAME)

CM 1

CRN 478945-85-6 CMF C9 H10 O3

CM 2

CRN 279243-82-2 CMF C20 H28 O2

L34 ANSWER 33 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2003:24309 USPATFULL

TITLE:

Modified polycyclic polymers

INVENTOR(S):

Jayaraman, Saikumar, Twinsburg, OH, UNITED STATES Benedikt, George Martin, Solon, OH, UNITED STATES Rhodes, Larry Funderburk, Silver Lake, OH, UNITED

STATES

Vicari, Richard, Strongsville, OH, UNITED STATES Allen, Robert David, San Jose, CA, UNITED STATES

DiPetro, Richard Anthony, San Jose, CA, UNITED STATES Sooriyakumaran, Ratnam, San Jose, CA, UNITED STATES

Wallow, Thomas, Union City, CA, UNITED STATES

PATENT ASSIGNEE(S):

The B.F. Goodrich Company (U.S. corporation)

	NUMBER KIN	D DATE	
PATENT INFORMATION:	US 2003018153 A1 US 6794459 B2		
APPLICATION INFO.: RELATED APPLN. INFO.:	US 2002-224994 Al Division of Ser. No. 11999, GRANTED, Pat. No.	US 1999-253499, filed on 19	Feb

NUMBER DATE

PRIORITY INFORMATION:

US 1998-75558P 19980223 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

Nestor W. Shust, Hudak & Shunk Co., L.P.A., Suite 808,

7 West Bowery St., Akron, OH, 44308-1133

NUMBER OF CLAIMS: 16 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 6 Drawing Page(s)

LINE COUNT: 2100

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **239137-09-8DP**, hydrolyzed

(modified polymers having polycyclic side chains for photoresists with improved hydrophilicity)

RN 239137-09-8 USPATFULL

CN 1,4:5,8-Dimethanonaphthalene-2-carboxylic acid, 1,2,3,4,4a,5,8,8a-

octahydro-, ethyl ester, polymer with 1,1-dimethylethyl

bicyclo[2.2.1]hept-5-ene-2-carboxylate, ethyl (3-

methylbicyclo[2.2.1]hept-5-en-2-yl)methyl carbonate and trimethylsilyl

bicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 239137-00-9 CMF C12 H18 O3

CM 2

CRN 154970-45-3 CMF C12 H18 O2

CM 3

CRN 61615-20-1 CMF C15 H20 O2

CM 4

CRN 56151-01-0 CMF C11 H18 O2 Si -SiMea

L34 ANSWER 34 OF 86 USPATFULL on STN

2003:190643 USPATFULL ACCESSION NUMBER:

Photoresists, polymers and processes for TITLE:

microlithography

Feiring, Andrew Edward, Wilmington, DE, United States INVENTOR(S):

Feldman, Jerald, Hockessin, DE, United States

E. I. du Pont de Nemours and Company, Wilmington, DE, PATENT ASSIGNEE(S):

United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION: US	6593058	B1	20030715	
WO	2000017712		20000330	
APPLICATION INFO.: US	2001-806096		20010323	(9)
WO	1999-US21912		19990921	

NUMBER DATE

US 1998-101502P 19980923 (60) PRIORITY INFORMATION: US 1999-120045P 19990212 (60)

Utility DOCUMENT TYPE: GRANTED FILE SEGMENT:

Ashton, Rosemary PRIMARY EXAMINER: Lee, Sin J. ASSISTANT EXAMINER:

31 NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

1 Drawing Figure(s); 1 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 1799

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

262617-09-4P, Norbornene-5-norbornene-2-carboxylic

acid-tetrafluoroethylene copolymer

(preparation and use in preparing UV photoresists for microlithog.)

RN262617-09-4 USPATFULL

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, polymer with CN

bicyclo[2.2.1]hept-2-ene and tetrafluoroethene (9CI) (CA INDEX NAME)

CM 1

CRN 498-66-8 CMF C7 H10



CM 2

120-74-1 CRN CMF C8 H10 O2 CO₂H

CM 3

CRN 116-14-3 CMF C2 F4

L34 ANSWER 35 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2003:40517 USPATFULL

TITLE:

Photosensitive polymer including copolymer of alkyl

vinyl ether and resist composition containing

the same

INVENTOR(S):

Choi, Sang-jun, Seoul, KOREA, REPUBLIC OF Kim, Hyun-woo, Seongnam, KOREA, REPUBLIC OF

PATENT ASSIGNEE(S):

Samsung Electronics Co., Ltd., Suwon, KOREA, REPUBLIC

OF (non-U.S. corporation)

NUMBER DATE

PRIORITY INFORMATION:

KR 2000-2489 20000119 KR 2000-20603 20000419

KR 2000-20603 20000419 US 2000-198761P 20000421 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility GRANTED

PRIMARY EXAMINER:

Ashton, Rosemary

LEGAL REPRESENTATIVE:

Volentine Francos, PLLC

NUMBER OF CLAIMS: 40 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS:

2 Drawing Figure(s); 2 Drawing Page(s)

LINE COUNT: 1049

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 350992-45-9P

(chemical amplified photoresists containing alkyl vinyl ether polymers for ArF excimer laser exposure)

RN 350992-45-9 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylethyl ester, polymer with 3,4-dihydro-2H-pyran and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 154970-45-3 CMF C12 H18 O2 OBu-t

2 CM

110-87-2 CRN C5 H8 O



3

108-31-6 CRN CMF C4 H2 O3

L34 ANSWER 36 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 21 2003:570079 HCAPLUS

ACCESSION NUMBER:

DOCUMENT NUMBER:

140:383006

TITLE:

Nonshrinkable photoresists for ArF

lithography

AUTHOR(S):

Kim, Jin-Baek; Oh, Tae Hwan; Choi, Jae-Hak; Lee,

CORPORATE SOURCE:

Department of Chemistry, School of Molecular Science (BK21) and Center for Advanced Functional Polymers, Korea Advanced Institute of Science and

Technology, Daejeon, 305-701, S. Korea

SOURCE:

Proceedings of SPIE-The International Society for Optical Engineering (2003), 5039(Pt. 2, Advances in

Resist Technology and Processing XX), 689-697

CODEN: PSISDG; ISSN: 0277-786X

PUBLISHER:

SPIE-The International Society for Optical Engineering

DOCUMENT TYPE:

Journal English

LANGUAGE:

683786-03-0P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(nonshrinkable chemical amplified photoresists for ArF lithog.

based on copolymers containing dimethyloxepanone acid labile group)

683786-03-0 HCAPLUS RN

CN

2H-Cyclopenta[b]naphth[2,1-d]oxepin-8-butanoic acid, 2-[(bicyclo[2.2.1]hept-5-en-2-ylcarbonyl)oxy]hexadecahydro-γ,4a,7atrimethyl-6-oxo-, methyl ester, $(\gamma R, 2R, 4aS, 4bS, 8R, 10aS, 10bR, 12aR)$ -, polymer with 2.5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 683786-01-8 CMF C33 H48 O6

CRN 108-31-6 CMF C4 H2 O3

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 22 L34 ANSWER 37 OF 86

ACCESSION NUMBER:

2002:522667 HCAPLUS

DOCUMENT NUMBER:

137:79393

TITLE:

Polymers of polycyclic compounds, resist

composition and patterning process

INVENTOR(S):

Tachibana, Seiichiro; Nakashima, Mutsuo; Nishi,

Tsunehiro; Kinsho, Takeshi; Hasegawa, Koji; Watanabe,

Takeru; Hatakeyama, Jun

PATENT ASSIGNEE(S):

Shin-Etsu Chemical Co., Ltd., Japan

SOURCE:

U.S. Pat. Appl. Publ., 38 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

1

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002091215	A1	20020711	US 2001-986274	20011108
US 6660448	B2	20031209		
JP 2002206012	A2	20020726	JP 2001-331910	20011030
TW 536665	В	20030611	TW 2001-90127928	20011109
PRIORITY APPLN. INFO.:			JP 2000-343324 A	20001110
TT 441071_34_7D				

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polymers of polycyclic compds., resist composition and patterning process)

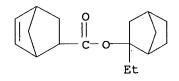
441071-34-7 HCAPLUS RN

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-ethylbicyclo[2.2.1]hept-2-yl CN ester, polymer with 3-(2-bicyclo[2.2.1]hept-5-en-2-yl-1hydroxyethyl)dihydro-2(3H)-furanone and 2,5-furandione (9CI) (CA INDEX NAME)

CRN 398488-21-6 CMF C13 H18 O3

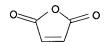
CM 2

CRN 330596-01-5 CMF C17 H24 O2



CM 3

CRN 108-31-6 CMF C4 H2 O3



L34 ANSWER 38 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 23

ACCESSION NUMBER:

2002:72739 HCAPLUS

DOCUMENT NUMBER:

136:142610

TITLE: INVENTOR(S):

Positive **photoresist** composition Sato, Kenichiro; Aoai, Toshiaki Fuji Photo Film Co., Ltd., Japan

PATENT ASSIGNEE(S): SOURCE:

U.S. Pat. Appl. Publ., 49 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
US 2002009666	A 1	20020124	US 2001-834639		20010416
US 6808860	B2	20041026			
JP 2001296661	A2	20011026	JP 2000-115497		20000417
JP 2002031890	A2	20020131	JP 2000-215574		20000717
JP 3444844	В2	20030908			
JP 2002040662	A2	20020206	JP 2000-231670		20000731
PRIORITY APPLN. INFO.:			JP 2000-115497	Α	20000417
			JP 2000-215574	Α	20000717
			JP 2000-231670	Α	20000731

IT 392310-13-3P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material

CM 1

CRN 392310-12-2 CMF C14 H18 O4

CM 2

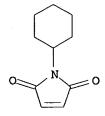
CRN 383196-79-0 CMF C12 H20 O2

CM 3

CRN 22497-08-1 CMF C10 H16 O

CM 4

CRN 1631-25-0 CMF C10 H13 N O2



L34 ANSWER 39 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 24

ACCESSION NUMBER:

2002:975674 HCAPLUS

DOCUMENT NUMBER:

138:63818

TITLE:

Novel oxanorbornene spiro derivatives and their

polymers for use as resists for photolithographic patterning

INVENTOR(S):

Hasegawa, Koji; Kaneo, Takeshi; Watanabe, Takeshi;

Nishi, Tsunehiro

PATENT ASSIGNEE(S):

Shin-Etsu Chemical Industry Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 39 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P.	ATENT NO.	KIND	DATE	AP	PLICATION NO.		DATE
_							
J	P 2002371080	A2	20021226	JP	2001-179593		20010614
U	s 2003036603	A1	20030220	US	2002-167393		20020613
PRIORI	TY APPLN. INFO.:			JP	2001-179593	Α	20010614
	COUDAD (A)	343 D D 3 M	100.0010				

OTHER SOURCE(S):

MARPAT 138:63818

478946-03-1P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oxanorbornene spiro derivative (polymers) for use in chemical amplified resists for photolithog. patterning)

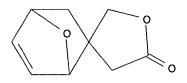
478946-03-1 HCAPLUS RN

CN

1,4:5,8-Dimethanonaphthalene-2-carboxylic acid, 1,2,3,4,4a,5,8,8aoctahydro-, 1-ethylcyclopentyl ester, polymer with spiro[furan-3(2H),2'-[7]oxabicyclo[2.2.1]hept[5]en]-5(4H)-one (9CI) (CA INDEX NAME)

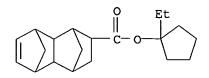
CM 1

CRN 478945-85-6 CMF C9 H10 O3



2 CM

CRN 279243-82-2 CMF C20 H28 O2



L34 ANSWER 40 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 25

ACCESSION NUMBER: 2002:904532 HCAPLUS

DOCUMENT NUMBER: 137:391087

TITLE: Positive-working photoresist compositions

containing specific resin and specific acid-generator

INVENTOR(S): Sato, Kenichiro; Kodama, Kunihiko PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 105 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
JP 2002341539	A2	20021127	JP 2001-149620		20010518
US 2003008241	A 1	20030109	US 2002-93411		20020311
US 6777160	B2	20040817			
TW 538317	В	20030621	TW 2002-91104604		20020312
PRIORITY APPLN. INFO.:			JP 2001-68849	Α	20010312
•			JP 2001-68850	Α	20010312
			JP 2001-149620	Α	20010518

IT 398141-14-5P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(resin; pos.-working photoresist compns.)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 41 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 26

ACCESSION NUMBER:

2002:848227 HCAPLUS

DOCUMENT NUMBER:

137:360309

TITLE:

Radiation-sensitive positive resist

compositions showing wide defocus latitude and less

particle generation on storage Kodama, Kunihiko; Sato, Kenichiro

INVENTOR(S):
PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 90 pp.

SOURCE: Jpi

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	_	DATE
JP 2002323767	A2	20021108	JP 2001-157366		20010525
US 2003017415	A 1	20030123	US 2002-79414		20020222
US 6858370	B2	20050222			
TW 548523	В	20030821	TW 2002-91103178		20020222
PRIORITY APPLN. INFO.:			JP 2001-48602	Α	20010223
			JP 2001-48783	Α	20010223
			JP 2001-48784	Α	20010223
			JP 2001-48880	Α	20010223
			JP 2001-157366	Α	20010525
			JP 2001-157367	Α	20010525

IT 398141-14-5

RL: TEM (Technical or engineered material use); USES (Uses) (radiation-sensitive pos. resist compns. showing wide defocus latitude and less particle generation on storage)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 3

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 42 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 27

ACCESSION NUMBER:

2002:848220 HCAPLUS

DOCUMENT NUMBER:

137:360306

TITLE:

Radiation-sensitive positively working photosensitive

composition

INVENTOR(S):
PATENT ASSIGNEE(S):

Kodama, Kunihiko; Sato, Kenichiro Fuji Photo Film Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 92 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
					-
JP 2002323758	A2	20021108	JP 2001-157367		20010525
US 2003017415	A1	20030123	US 2002-79414		20020222
us 6858370	B2	20050222			
PRIORITY APPLN. INFO .:			JP 2001-48783	Α	20010223
			JP 2001-48602	Α	20010223
•			JP 2001-48784	Α	20010223
			JP 2001-48880	Α	20010223
			JP 2001-157366	Α	20010525
			JP 2001-157367	Α	20010525

IT 398141-14-5P 405509-24-2P 474510-67-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(radiation-sensitive pos. working photosensitive composition for high resolution and storage stability)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CRN 79-10-7 CMF C3 H4 O2

RN 405509-24-2 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1-hydroxy-1-methylethyl ester, polymer with 2,5-furandione, 1-methyl-1-tricyclo[3.3.1.13,7]dec-1-ylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate and tetrahydro-5-oxo-3-furanyl bicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 405509-23-1 CMF C11 H16 O3

CM 2

CRN 398140-70-0 CMF C12 H14 O4

CM 3

CRN 328087-76-9 CMF C21 H30 O2

CRN 108-31-6 CMF C4 H2 O3

RN 474510-67-3 HCAPLUS
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl ester, poly

hydroxytricyclo[3.3.1.13,7]dec-1-yl ester, polymer with 1-bicyclo[2.2.1]hept-5-en-2-yl-2-methyl-2-(4-methylcyclohexyl)-1-propanone, 5-ethoxy-3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indene and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 474510-66-2 CMF C18 H28 O

CM 2

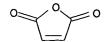
CRN 331866-92-3 CMF C18 H24 O3

CM 3

CRN 53018-26-1 CMF C12 H18 O

CM 4

CRN 108-31-6 CMF C4 H2 O3



L34 ANSWER 43 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 28

ACCESSION NUMBER:

2002:792710 HCAPLUS

DOCUMENT NUMBER:

137:317922

TITLE:

SOURCE:

Positive photoresist compositions offering

sharp patterns Sato, Kenichiro

INVENTOR(S): PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 85 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				-
JP 2002303984	A2	20021018	JP 2001-135245	20010502
PRIORITY APPLN. INFO.:			JP 2001-22010 A	20010130

OTHER SOURCE(S):

MARPAT 137:317922

398141-14-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pos. photoresist compns. offering sharp patterns)

RN 398141-14-5 HCAPLUS

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, CN polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

398140-58-4 CRN CMF C13 H20 O2

CM 2

342648-11-7 CMF C13 H22 O2

3

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 44 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 29

ACCESSION NUMBER:

2002:673047 HCAPLUS

DOCUMENT NUMBER:

137:224108

TITLE:

Storage-stable excimer laser-sensitive

positive-working photosensitive compositions with

reduced pattern variation on defocusing

INVENTOR(S):

Kodama, Kunihiko; Sato, Kenichiro Fuji Photo Film Co., Ltd., Japan

PATENT ASSIGNEE(S): SOURCE:

LANGUAGE:

Jpn. Kokai Tokkyo Koho, 86 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				_	
JP 2002251012	A2	20020906	JP 2001-48784		20010223
US 2003017415	A1	20030123	US 2002-79414		20020222
US 6858370	B2	20050222			
TW 548523	В	20030821	TW 2002-91103178		20020222
PRIORITY APPLN. INFO.:			JP 2001-48602	Α	20010223
			JP 2001-48783	Α	20010223
			JP 2001-48784	Α	20010223
			JP 2001-48880	Α	20010223
			JP 2001-157366	Α	20010525
			JP 2001-157367	Α	20010525

IT 398141-14-5P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(chemical amplified storage-stable excimer laser-sensitive pos.

photoresists with reduced pattern variation on defocusing)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 45 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 30

ACCESSION NUMBER:

2002:673045 HCAPLUS

DOCUMENT NUMBER:

137:224107

TITLE:

SOURCE:

Chemically amplified positive-working far-UV photoresist compositions suitable for halftone

phase-shift masks

INVENTOR(S):

Sato, Kenichiro; Uenishi, Kazuya Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 104 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

. 1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2001-48782 20020906 **A2** JP 2002251011 JP 2001-48782 PRIORITY APPLN. INFO .:

OTHER SOURCE(S):

MARPAT 137:224107

20010223 20010223

ΙT 398141-14-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(chemical amplified pos.-working far-UV photoresists suitable for halftone phase-shift masks)

398141-14-5 HCAPLUS RN

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, CN polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

398140-58-4 CRN CMF C13 H20 O2

2 CM

342648-11-7 CRN CMF C13 H22 O2

3 CM

CRN 108-31-6 CMF C4 H2 O3

CM

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 46 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 31

ACCESSION NUMBER:

2002:592336 HCAPLUS

DOCUMENT NUMBER:

137:147763

TITLE:

Chemically amplified positive-working photoresist composition providing fine

resolution patterns

INVENTOR(S):

Fujimori, Toru

PATENT ASSIGNEE(S):

SOURCE:

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 94 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

1

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				-
JP 2002221796	A2	20020809	JP 2001-18868	20010126
ORITY APPLN. INFO.:			JP 2001-18868	20010126

PRIO OTHER SOURCE(S):

MARPAT 137:147763

398141-14-5

RL: TEM (Technical or engineered material use); USES (Uses) (in chemical amplified pos.-working photoresist composition for far-UV exposure)

RN 398141-14-5 HCAPLUS

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, CN polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

2 CM

342648-11-7 CRN CMF C13 H22 O2

CM 3

108-31-6 CRN CMF C4 H2 O3

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 47 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 32

ACCESSION NUMBER: 2002:566567 HCAPLUS

DOCUMENT NUMBER: 137:132103

TITLE: Positive-working photoresist composition

INVENTOR(S): Fujimori, Toru

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 93 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002214787	A2	20020731	JP 2001-13298	20010122
PRIORITY APPLN. INFO.:			JP 2001-13298	20010122

IT 398141-14-5P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(resin in pos.-working photoresist composition)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CRN 108-31-6 CMF C4 H2 O3

CM

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 48 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 33

ACCESSION NUMBER:

2002:566566 HCAPLUS

DOCUMENT NUMBER:

137:132102

TITLE:

Positive-working photoresist composition

INVENTOR(S):

Fujimori, Toru

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 78 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese 1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002214786	A2	20020731	JP 2001-10481	20010118
PRIORITY APPLN. INFO.:			JP 2001-10481	20010118
IT 398141-14-5P				

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(resin in pos.-working photoresist composition)

RN398141-14-5 HCAPLUS

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, CN polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 49 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 34

ACCESSION NUMBER:

2002:538441 HCAPLUS

DOCUMENT NUMBER:

SOURCE:

137:116950

TITLE:

Chemically amplified far-UV positive **photoresists** compositions with improved exposure margin and defocus latitude

INVENTOR(S):

Sato, Kenichiro

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 81 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002202607	A2	20020719	JP 2000-402246	20001228

OTHER SOURCE(S): MARPAT 137:116950

IT 398141-14-5

RL: TEM (Technical or engineered material use); USES (Uses) (far-UV pos. **photoresists** having sulfonium and iodonium photoacid generators with improved exposure margin and defocus latitude)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 35 L34 ANSWER 50 OF 86

2002:538440 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

137:116949

TITLE:

Storage-stable chemically amplified far-UV positive

photoresists compositions with good

sensitivity and no aggregation

INVENTOR(S):

Sato, Kenichiro

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 81 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002202606 PRIORITY APPLN. INFO.:	A2	20020719	JP 2000-402245 JP 2000-402245	20001228 20001228

IT 398141-14-5

RL: TEM (Technical or engineered material use); USES (Uses) (storage-stable far-UV pos. photoresist compns. in solvents with good solubility)

398141-14-5 HCAPLUS RN

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, CN polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

398140-58-4 CRN CMF C13 H20 O2

2 CM

CRN 342648-11-7 C13 H22 O2 CMF

CM 3

CRN 108-31-6 CMF C4 H2 O3

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 51 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 36

ACCESSION NUMBER:

2002:539335 HCAPLUS

DOCUMENT NUMBER:

137:101423

TITLE:

Storage-stable chemically amplified far-UV positive

photoresist compositions suitable for

half-tone phase-shift photomasks

INVENTOR(S):

Sato, Kenichiro

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 80 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002202605	A2	20020719	JP 2000-402244	20001228
PRIORITY APPLN. INFO.:			JP 2000-402244	20001228

OTHER SOURCE(S):

MARPAT 137:101423

IT 398141-14-5

RL: TEM (Technical or engineered material use); USES (Uses) (storage-stable far-UV pos. **photoresists** containing triphenylsulfonium photoacid generators for half-tone phase-shift photomasks)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 52 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 37

ACCESSION NUMBER: 2002:237124 HCAPLUS

DOCUMENT NUMBER: 136:286589

TITLE: Positive-working chemically amplified

photoresist composition containing specific

acid-sensitive resin and specific nitrogen-containing

compound for semiconductor device fabrication

INVENTOR(S): Fujimori, Toru; Kawabe, Yasumasa; Nakao, Hajime
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 92 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				
JP 2002090987	A2	20020327	JP 2001-209543	20010710
US 2002155383	Al	20021024	US 2001-902793	20010712
US 6692897	B2	20040217		
PRIORITY APPLN. INFO.:			JP 2000-211642 A	20000712
OTHER SOURCE(S):	MARPAT	136:286589		

IT 398141-14-5P 405509-24-2P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(resin in pos.-working photoresist composition)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 405509-24-2 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1-hydroxy-1-methylethyl ester, polymer with 2,5-furandione, 1-methyl-1-tricyclo[3.3.1.13,7]dec-1-ylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate and tetrahydro-5-oxo-3-furanyl bicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI) (CA INDEX NAME)

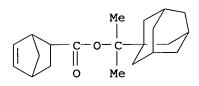
CM 1

CRN 405509-23-1 CMF C11 H16 O3

CRN 398140-70-0 CMF C12 H14 O4

3 CM

CRN 328087-76-9 CMF C21 H30 O2



CM

CRN 108-31-6 CMF C4 H2 O3

L34 ANSWER 53 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 38

ACCESSION NUMBER:

2002:904448 HCAPLUS

DOCUMENT NUMBER:

138:9656

TITLE:

Positive photosensitive composition

INVENTOR(S):

Kodama, Kunihiko; Sato, Kenichiro; Fujimori, Toru

Fuji Photo Film Co., Ltd., Japan

PATENT ASSIGNEE(S): SOURCE:

Eur. Pat. Appl., 145 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT	NO.			KIN	D :	DATE			APPL:	ICAT:	ION I	NO.		D.	ATE	
EP	1260	864			A 1		2002	1127		EP 2	002-	1151	6		2	0020	522
ΕP	1260	864			B1		2004	0818									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2002351077	A2	20021204	JP	2001-152587		20010522
JP 2002351079	A2	20021204	JР	2001-155897		20010524
JP 2002351063	A2	20021204	JP	2001-159060		20010528
us 2003077540	A1	20030424	US	2002-150967		20020521
PRIORITY APPLN. INFO.:		•	JP	2001-152587	Α	20010522
			JP	2001-155897	Α	20010524
			JР	2001-159060	Α	20010528

OTHER SOURCE(S): MARPAT 138:9656

IT 398141-14-5P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(resin; pos photoresist composition containing)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CM 2

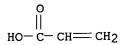
CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2



REFERENCE COUNT:

9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 54 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 39

ACCESSION NUMBER:

2002:272837 HCAPLUS

DOCUMENT NUMBER:

136:310309

TITLE:

Polymers with cyclopentane rings in or adjacent to the

chains, resist composition and patterning

process

INVENTOR(S):

Nishi, Tsunehiro; Nakashima, Mutsuo; Hasegawa, Koji;

Tachibana, Seiichiro; Kinsho, Takeshi; Watanabe,

Takeru; Hatakeyama, Jun

PATENT ASSIGNEE(S):

Shin-Etsu Chemical Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 47 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.		KINI	DATE	APPLICATION NO.	DATE
EP 1195390		A 1	20020410	EP 2001-307791	20010913
EP 1195390		B1	20041208		
R: AT	, BE, CH	DE,	DK, ES, FR,	GB, GR, IT, LI, LU, N	IL, SE, MC, PT,
IE	, SI, LT	LV,	FI, RO		
JP 2002161	116	A2	20020604	JP 2001-269745	20010906
TW 557304		В	20031011	TW 2001-90122771	20010913
US 2002061	463	A1	20020523	US 2001-951523	20010914
บร 6673515		В2	20040106		
PRIORITY APPLN.	INFO.:			JP 2000-279164	A 20000914
TT 400003 CE	0.10				

IT 409093-65-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polymers with cyclopentane rings in or adjacent to the chains for **resists** patternable by UV or electron beams)

RN 409093-65-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethylbicyclo[2.2.1]hept-2-yl ester, polymer with 5-(2-bicyclo[2.2.1]hept-5-en-2-ylethyl)dihydro-2(3H)-furanone and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 370089-03-5 CMF C13 H18 O2

CM 2

CRN 330595-98-7 CMF C13 H20 O2

CRN 108-31-6 CMF C4 H2 O3

REFERENCE COUNT:

9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 55 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 40

ACCESSION NUMBER:

2002:119352 HCAPLUS 136:175472

DOCUMENT NUMBER: TITLE:

Positive photosensitive composition for

photofabrication using deep UV ray

INVENTOR(S):

Kodama, Kunihiko; Aoai, Toshiaki

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 120 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

1	PAT	ENT	NO.			KIN	D	DATE		AP	PLICAT	NOIT	10.		D.	ATE	
-							-								_		
I	EΡ	1179	750			A 1		2002	0213	EP	2001-	-11779	96		2	0010	802
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, G	R, IT,	, LI,	LU,	NL,	SE,	MC,	PT,
			IE,	SI,	LT,	LV,	FI,	RO									
Ċ	JP	2002	1229	94		A2		2002	0426	JP	2001-	-18867	70		2	0010	621
τ	US	2002	0519	33		A 1		2002	0502	US	2001-	-92169	91		2	0010	806
τ	US	6492	091			B2		2002	1210								
PRIOR	ITY	APP	LN.	INFO	. :					JP	2000-	-24005	59	I	A 2	0000	808
IT 3	398	141-	14-5	P													

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(resin; deep UV photofabrication pos. photoresist composition containing)

RN 398141-14-5 HCAPLUS

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, CN polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CRN 342648-11-7 CMF C13 H22 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 56 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2002:301718 USPATFULL

TITLE:

 $\hbox{Polymeric compound and resin composition for}\\$

photoresist

INVENTOR(S):

Funaki, Yoshinori, Himeji-shi, JAPAN Tsutsumi, Kiyoharu, Himeji-shi, JAPAN Takaragi, Akira, Himeji-shi, JAPAN

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002169266	A1	20021114	
	US 6552143	B2	20030422	
APPLICATION INFO.:	US 2001-937910	A1	20011019	(9)
	WO 2001-JP515		20010126	

NUMBER DATE

PRIORITY INFORMATION:

JP 2000-24527

20000201

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS

CHURCH, VA, 22040-0747

NUMBER OF CLAIMS:

5

EXEMPLARY CLAIM: LINE COUNT:

1 3139

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 353289-59-5P

(polymeric compound for photoresist and resin composition for photoresist)

RN 353289-59-5 USPATFULL

CN Tricyclo[3.3.1.13,7]decane-1-carboxylic acid, 3-[(1-oxo-2-propenyl)oxy]-,

1,1-dimethylethyl ester, polymer with 2,5-furandione, 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-propenoate and

3a, 4, 7, 7a-tetrahydro-4, 7-methanoisobenzofuran-1(3H)-one (9CI) (CA INDEX

NAME)

CM 1

CRN 251563-20-9 CMF C18 H26 O4

CM 2

CRN 216581-76-9 CMF C13 H18 O3

CM 3

CRN 85718-44-1 CMF C9 H10 O2

CM 4

CRN 108-31-6



L34 ANSWER 57 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2002:279949 USPATFULL

TITLE:

Positive resist composition

INVENTOR(S):

Fujimori, Toru, Shizuoka, JAPAN Kawabe, Yasumasa, Shizuoka, JAPAN

Nakao, Hajime, Shizuoka, JAPAN

PATENT ASSIGNEE(S):

FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)

NUMBER DATE

PRIORITY INFORMATION:

JP 2000-211642 20000712

DOCUMENT TYPE:

Utility

FILE SEGMENT:

0 CIII CY

THEN DEPONDED IN

APPLICATION

LEGAL REPRESENTATIVE:

SUGHRUE, MION, ZINN,, MACPEAK & SEAS, PLLC, 2100

Pennsylvania Avenue, NW, Washington, DC, 20037-3213

NUMBER OF CLAIMS:

17 1

EXEMPLARY CLAIM:

LINE COUNT:

2009

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 398141-14-5P 405509-24-2P

(resin in pos.-working photoresist composition)

RN 398141-14-5 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,

polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl

2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4 CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CRN 108-31-6 CMF C4 H2 O3

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 405509-24-2 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1-hydroxy-1-methylethyl ester, polymer with 2,5-furandione, 1-methyl-1-tricyclo[3.3.1.13,7]dec-1-ylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate and tetrahydro-5-oxo-3-furanyl bicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI) (CA INDEX NAME)

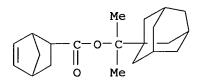
CM :

CRN 405509-23-1 CMF C11 H16 O3

CM 2

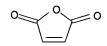
CRN 398140-70-0 CMF C12 H14 O4

CRN 328087-76-9 CMF C21 H30 O2



4 CM

CRN 108-31-6 CMF C4 H2 O3



L34 ANSWER 58 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2002:172456 USPATFULL

TITLE:

Novel photoresist monomer having hydroxy

group and carboxy group, copolymer thereof and

photoresist composition using the same

INVENTOR(S):

Lee, Geun Su, Ichon-shi, KOREA, REPUBLIC OF Koh, Cha Won, Ichon-shi, KOREA, REPUBLIC OF Jung, Jae Chang, Ichon-shi, KOREA, REPUBLIC OF Jung, Min Ho, Ichon-shi, KOREA, REPUBLIC OF Baik, Ki Ho, Ichon-shi, KOREA, REPUBLIC OF

PATENT ASSIGNEE(S):

Hyundai Electronics Industries Co., Ltd., Ichon-shi,

KOREA, REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002091216	A1	20020711	
	US 6586619	B2	20030701	
APPLICATION INFO.:	US 2002-79753	A 1	20020219	(1

RELATED APPLN. INFO.:

Division of Ser. No. US 1999-383861, filed on 26 Aug

1999, PENDING

		NUMBER	DATE
PRIORITY	INFORMATION:	KR 1998-34694	19980826
		KR 1998-39079	19980921

Utility

DOCUMENT TYPE: FILE SEGMENT:

APPLICATION

TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO LEGAL REPRESENTATIVE: CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834

NUMBER OF CLAIMS: 40 1 EXEMPLARY CLAIM: 979 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

(preparation of photoresist copolymer using new photoresist-monomer for photoresist composition with submicron resolution)

RN 260065-43-8 USPATFULL

CN 7-Oxabicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, mono(5-hydroxypentyl) ester, polymer with bicyclo[2.2.1]hept-2-ene, 1,1-dimethylethyl hydrogen bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylate and 2,5-furandione (9CI) (CA

CRN 260065-28-9 CMF C13 H18 O6

CM 2

CRN 76198-01-1 CMF C13 H18 O4

CM 3

CRN 498-66-8 CMF C7 H10



CM 4

CRN 108-31-6 CMF C4 H2 O3

L34 ANSWER 59 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2002:

2002:119480 USPATFULL

TITLE:

Polymer, resist composition and patterning

process

INVENTOR(S):

Nishi, Tsunehiro, Nakakubiki-gun, JAPAN
Nakashima, Mutsuo, Nakakubiki-gun, JAPAN
Tachibana, Seiichiro, Nakakubiki-gun, JAPAN
Kinsho, Takeshi, Nakakubiki-gun, JAPAN
Hasegawa, Koji, Nakakubiki-gun, JAPAN

Watanabe, Takeru, Nakakubiki-gun, JAPAN Hatakeyama, Jun, Nakakubiki-gun, JAPAN

Shin-Etsu Chemical Co., Ltd., Tokyo, JAPAN (non-U.S. PATENT ASSIGNEE(S):

corporation)

KIND DATE NUMBER 20020523 PATENT INFORMATION: US 2002061463 Α1 US 6673515 B2 20040106 US 2001-951523 A1 20010914 APPLICATION INFO.: (9)

> DATE NUMBER -----

PRIORITY INFORMATION:

JP 2000-279164

DOCUMENT TYPE:

20000914

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON

BLVD., SUITE 1400, ARLINGTON, VA, 22201

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

1

LINE COUNT:

1766

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

409093-65-8P

(polymers with cyclopentane rings in or adjacent to the chains for resists patternable by UV or electron beams)

RN409093-65-8 USPATFULL

2-Propenoic acid, 2-methyl-, 2-ethylbicyclo[2.2.1]hept-2-yl ester, polymer CN with 5-(2-bicyclo[2.2.1]hept-5-en-2-ylethyl)dihydro-2(3H)-furanone and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

370089-03-5 CRN CMF C13 H18 O2

CM 2

330595-98-7 CRN C13 H20 O2 CMF

CM 3

CRN 108-31-6 CMF C4 H2 O3



INVENTOR(S):

L34 ANSWER 60 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2002:99037 USPATFULL

TITLE:

Positive photosensitive composition Kodama, Kunihiko, Shizuoka, JAPAN

Aoai, Toshiaki, Shizuoka, JAPAN

PATENT ASSIGNEE(S):

FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2002051933

US 2002051933 A1 20020502 US 6492091 B2 20021210

APPLICATION INFO.: US 2001-921691 A1 20010806 (9)

NUMBER DATE

PRIORITY INFORMATION:

JP 2000-240059 20000808

DOCUMENT TYPE:

Utility

i t v

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC, 2100

Pennsylvania Avenue, N.W., Washington, DC, 20037

NUMBER OF CLAIMS:

20

EXEMPLARY CLAIM:

1 2260

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 398141-14-5P

(resin; deep UV photofabrication pos. photoresist composition containing)

RN 398141-14-5 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,

polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl

2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

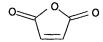
CRN 398140-58-4

CMF C13 H20 O2

CM 2

CRN 342648-11-7 CMF C13 H22 O2

CRN 108-31-6 CMF C4 H2 O3



CM 4

CRN 79-10-7 CMF C3 H4 O2

INVENTOR(S):

L34 ANSWER 61 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2002:12648 USPATFULL

TITLE: Novel ester compounds, polymers, resist

compositions and patterning process
Nishi, Tsunehiro, Niigata-ken, JAPAN

Hasegawa, Koji, Niigata-ken, JAPAN Watanabe, Takeru, Niigata-ken, JAPAN Kinsho, Takeshi, Niigata-ken, JAPAN Nakashima, Mutsuo, Niigata-ken, JAPAN Tachibana, Seiichiro, Niigata-ken, JAPAN

Hatakeyama, Jun, Niigata-ken, JAPAN

PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Tokyo, JAPAN (non-U.S.

corporation)

NUMBER DATE

PRIORITY INFORMATION: JP 2000-127532 20000427

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON

BLVD., SUITE 1400, ARLINGTON, VA, 22201

NUMBER OF CLAIMS: 5 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 1531

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 370089-04-6P

(preparation of ester compound and polymers for photoresist compns. and patterning process)

RN 370089-04-6 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 3-[(1-ethylcyclopentyl)oxy]-1-methyl-3-oxopropyl ester, polymer with 5-(2-bicyclo[2.2.1]hept-5-en-2-ylethyl)dihydro-2(3H)-furanone (9CI) (CA INDEX NAME)

CM 1

CRN 370089-03-5 CMF C13 H18 O2

CM 2

CRN 370088-90-7 CMF C19 H28 O4

L34 ANSWER 62 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2002:239130 USPATFULL

TITLE:

Modified polycyclic polymers

INVENTOR(S):

Jayaraman, Saikumar, Twinsburg, OH, United States Benedikt, George Martin, Solon, OH, United States Rhodes, Larry Funderburk, Silver Lake, OH, United

States

Vicari, Richard, Strongsville, OH, United States Allen, Robert David, San Jose, CA, United States DiPietro, Richard Anthony, San Jose, CA, United States

Sooriyakumaran, Ratnam, San Jose, CA, United States

Wallow, Thomas, Union City, CA, United States

PATENT ASSIGNEE(S):

The B.F. Goodrich Company, Charlotte, NC, United States

(U.S. corporation)

International Business Machines Corp., Armonk, NY,

United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6451945	В1	20020917	
APPLICATION INFO .:	US 1999-253499		19990219	(9)

NUMBER DATE

PRIORITY INFORMATION: U

US 1998-75558P 19980223 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER:

Moore, Margaret G.

LEGAL REPRESENTATIVE: Dunla

Dunlap, Thoburn T., Hudak & Shunk Co., LPA

NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

6 Drawing Figure(s); 6 Drawing Page(s)

LINE COUNT: 1954

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 239137-09-8DP, hydrolyzed

(modified polymers having polycyclic side chains for photoresists with improved hydrophilicity)

RN 239137-09-8 USPATFULL

CN 1,4:5,8-Dimethanonaphthalene-2-carboxylic acid, 1,2,3,4,4a,5,8,8a-octahydro-, ethyl ester, polymer with 1,1-dimethylethyl

bicyclo[2.2.1]hept-5-ene-2-carboxylate, ethyl (3-

methylbicyclo[2.2.1]hept-5-en-2-yl)methyl carbonate and trimethylsilylbicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI) (CA INDEX NAME)

CRN 239137-00-9 CMF C12 H18 O3

CM 2

CRN 154970-45-3 CMF C12 H18 O2

CM 3

CRN 61615-20-1 CMF C15 H20 O2

CM 4

CRN 56151-01-0 CMF C11 H18 O2 Si

L34 ANSWER 63 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2002:188208 USPATFULL

TITLE:

Photoresist monomer, polymer thereof and

photoresist composition containing it
INVENTOR(S): Jung, Min Ho, Kyoungki-do, KOREA, REPU

Jung, Min Ho, Kyoungki-do, KOREA, REPUBLIC OF Jung, Jae Chang, Kyoungki-do, KOREA, REPUBLIC OF Lee, Geun Su, Kyoungki-do, KOREA, REPUBLIC OF Baik, Ki Ho, Kyoungki-do, KOREA, REPUBLIC OF Hyundai Electronics Industries Co., Ltd., KOREA,

REPUBLIC OF (non-U.S. corporation)

KR 1999-31304 19990730

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Ashton, Rosemary

LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP

NUMBER OF CLAIMS: 26 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 1080

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 332138-97-3P

PATENT ASSIGNEE(S):

(copolymer in deep UV-sensitive resist composition)

RN 332138-97-3 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, mono[2-(1-pyrrolidinyl)ethyl] ester, polymer with bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate, 2,5-furandione and 2-hydroxyethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 332138-78-0 CMF C15 H21 N O4

CM 2

CRN 154970-45-3 CMF C12 H18 O2

CM 3

CRN 37503-42-7 CMF C10 H14 O3

CRN 120-74-1 CMF C8 H10 O2

CM 5

CRN 108-31-6 CMF C4 H2 O3

L34 ANSWER 64 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2002:174921 USPATFULL

Resist compositions and patterning process TITLE: INVENTOR(S): Nishi, Tsunehiro, Nakakubiki-gun, JAPAN Ohsawa, Youichi, Nakakubiki-gun, JAPAN

Hatakeyama, Jun, Nakakubiki-gun, JAPAN

PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Tokyo, JAPAN (non-U.S.

corporation)

NUMBER KIND DATE US 6420085 B1 20020716 PATENT INFORMATION: US 2000-663830 20000915 (9) APPLICATION INFO.:

> NUMBER DATE -----

JP 1999-263257 19990917 PRIORITY INFORMATION:

DOCUMENT TYPE: Utility GRANTED FILE SEGMENT:

Ashton, Rosemary PRIMARY EXAMINER:

Millen, White, Zelano & Branigan, P.C. LEGAL REPRESENTATIVE:

14 NUMBER OF CLAIMS: EXEMPLARY CLAIM:

0 Drawing Figure(s); 0 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 1276

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

330596-00-4

(resist compns. comprising sulfonium photoacid generator and copolymers for ArF laser lithog. and patterning process)

RN 330596-00-4 USPATFULL

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1-ethylcyclopentyl ester, CN polymer with 1-ethylcyclopentyl 2-methyl-2-propenoate and 2,5-furandione (9CI) (CA INDEX NAME)

CRN 279243-69-5 CMF C15 H22 O2

2 CM

CRN . 266308-58-1 CMF C11 H18 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

L34 ANSWER 65 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2002:152742 USPATFULL

TITLE:

Photoresist monomer having hydroxy group and

carboxy group, copolymer thereof and

photoresist composition using the same

INVENTOR(S):

Lee, Geun Su, Kyoungki-do, KOREA, REPUBLIC OF Koh, Cha Won, Kyoungki-do, KOREA, REPUBLIC OF Jung, Jae Chang, Kyoungki-do, KOREA, REPUBLIC OF Jung, Min Ho, Kyoungki-do, KOREA, REPUBLIC OF Baik, Ki Ho, Kyoungki-do, KOREA, REPUBLIC OF Hyundai Electronics Industries Co., Ltd., KOREA,

PATENT ASSIGNEE(S):

REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION: APPLICATION INFO.:	us 6410670 us 1999-383861	B1	20020625 19990826	(9)
,	NUMBER	DA'	ΓE	

PRIORITY INFORMATION:

KR 1998-34694 19980826 KR 1998-39079 19980921

DOCUMENT TYPE: FILE SEGMENT:

Utility GRANTED

PRIMARY EXAMINER: ASSISTANT EXAMINER: Wu, David W. Zalukaeva, Tanya LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP NUMBER OF CLAIMS: 9

1

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 879

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 260065-43-8P

(preparation of photoresist copolymer using new photoresist-monomer for photoresist composition with submicron resolution)

RN 260065-43-8 USPATFULL

7-Oxabicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, mono(5-hydroxypentyl) ester, polymer with bicyclo[2.2.1]hept-2-ene, 1,1-dimethylethyl hydrogen bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylate and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 260065-28-9 CMF C13 H18 O6

CM 2

CRN 76198-01-1 CMF C13 H18 O4

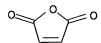
CM 3

CRN 498-66-8 CMF C7 H10



CM 4

CRN 108-31-6 CMF C4 H2 O3



L34 ANSWER 66 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2002:136731 USPATFULL

TITLE: Cross-linker monomer comprising double bond and

photoresist copolymer containing the same

INVENTOR(S): Lee, Geun Su, Kyoungki-do, KOREA, REPUBLIC OF

Jung, Jae Chang, Kyoungki-do, KOREA, REPUBLIC OF Baik, Ki Ho, Kyoungki-do, KOREA, REPUBLIC OF

PATENT ASSIGNEE(S): Hyundai Electronics Industries Co., Ltd., KOREA,

REPUBLIC OF (non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6403281 B1 20020611

APPLICATION INFO.: US 2000-643460 20000822 (9)

NUMBER DATE

PRIORITY INFORMATION: KR 1999-35046 19990823 DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Ashton, Rosemary

LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP

NUMBER OF CLAIMS: 2: EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 6 Drawing Figure(s); 6 Drawing Page(s)

LINE COUNT: 530

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 328068-00-4P, Mono-2-ethyl-2-(hydroxymethyl)-butylbicyclo-[2.2.1]hept-5-ene-2,3-dicarboxylate-maleic acid anhydride-norbornene-tertbutylbicyclo-[2.2.1]-hept-5-ene-2-carboxylate-2,5-hexanediol diacrylate
copolymer

(preparation of photoresist copolymer containing crosslinking monomer with double bond)

RN 328068-00-4 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, mono[2-ethyl-2-(hydroxymethyl)butyl] ester, polymer with bicyclo[2.2.1]hept-2-ene, 1,4-dimethyl-1,4-butanediyl di-2-propenoate, 1,1-dimethylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 250583-69-8 CMF C16 H24 O5

CM 2

CRN 154970-45-3 CMF C12 H18 O2

CRN 85996-28-7 CMF C12 H18 O4

CM 4

CRN 498-66-8 CMF C7 H10



CM 5

CRN 108-31-6 CMF C4 H2 O3



L34 ANSWER 67 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 41

ACCESSION NUMBER:

2003:156547 HCAPLUS

DOCUMENT NUMBER:

138:385816

TITLE:

Synthesis of a novel methacrylate,

(1,4-dioxa-8-methacrylate amide spiro [4,5] decane)

monomer and its co-polymerization with

t-butyl-3 α -methacryloxy-7 α , 12 α -

dihydroxy-5 β cholan-24-oate for 193 nm

photoresist

AUTHOR(S):

Karak, Niranjan; Ko, Jong Sung; Kim, Jin-Baek

CORPORATE SOURCE: Department of Chemistry, Korea Advanced Institute of

Sciences and Technology, Taejon, 305701, S. Korea Journal of Polymer Materials (2002), 19(4), 365-372

SOURCE: Journal of Polymer Materials (CODEN: JOPME8; ISSN: 0970-0838

PUBLISHER:

LANGUAGE:

Oxford & IBH Publishing Co. Pvt. Ltd.

DOCUMENT TYPE:

Journal English

IT 525558-73-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(synthesis of 1,4-dioxa-8-azospiro[4.5]decane 8-methacrylamide monomer and its copolymn. with tert-butyl-3 α -methacryloxy-7 α ,12 α - dihydroxy-5 β cholan-24-oate for 193 nm photoresist)

RN 525558-73-0 HCAPLUS CN Cholan-24-oic acid,

Cholan-24-oic acid, 7,12-dihydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, 1,1-dimethylethyl ester, $(3\alpha,5\beta,7\alpha,12\alpha)$ -, polymer with 2,5-furandione, 8-(2-methyl-1-oxo-2-propenyl)-1,4-dioxa-8-azaspiro[4.5]decane and α -[2,2,2-trifluoro-1,1-bis(trifluoromethyl)ethoxy]bicyclo[2.2.1]hept-5-ene-2-methanol (9CI) (CA INDEX NAME)

CM 1

CRN 525558-70-7 CMF C12 H11 F9 O2

CM 2

CRN 525558-69-4 CMF C32 H52 O6

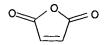
Absolute stereochemistry.

CM 3

CRN 525558-68-3 CMF C11 H17 N O3

CM 4

CRN 108-31-6



REFERENCE COUNT:

17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 42 L34 ANSWER 68 OF 86

ACCESSION NUMBER:

2001:582183 HCAPLUS

DOCUMENT NUMBER:

135:160158

TITLE:

Polymeric compound for photoresist and resin

composition for photoresist

INVENTOR(S):

Funaki, Yoshinori; Tsutsumi, Kiyoharu; Takaragi, Akira

PATENT ASSIGNEE(S):

Daicel Chemical Industries, Ltd., Japan

SOURCE:

PCT Int. Appl., 120 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE	
WO 2001057597 A1 20010809 WO 2001-JP515 2001	0126
W: KR, US RW: DE, FR, GB	
JP 2001215703 A2 20010810 JP 2000-24527 2000	0201
EP 1172694 A1 20020116 EP 2001-949041 2001	0126
R: DE, FR, GB	
TW 538311 B 20030621 TW 2001-90101862 2001	0131
US 2002169266 A1 20021114 US 2001-937910 2001	1019
US 6552143 B2 20030422	
US 2004006189 A1 20040108 US 2003-375129 2003	0228
US 6806335 B2 20041019	
PRIORITY APPLN. INFO.: JP 2000-24527 A 2000	0201
WO 2001-JP515 W 2001	0126
US 2001-937910 A1 2001	1019

IT 353289-59-5P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polymeric compound for photoresist and resin composition for photoresist)

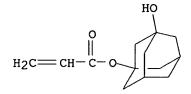
353289-59-5 HCAPLUS RN

Tricyclo[3.3.1.13,7]decane-1-carboxylic acid, 3-[(1-oxo-2-propenyl)oxy]-, CN 1,1-dimethylethyl ester, polymer with 2,5-furandione, 3hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-propenoate and 3a,4,7,7a-tetrahydro-4,7-methanoisobenzofuran-1(3H)-one (9CI) (CA INDEX NAME)

CM 1

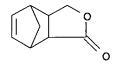
CRN 251563-20-9 CMF C18 H26 O4

CRN 216581-76-9 CMF C13 H18 O3



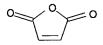
CM 3

CRN 85718-44-1 CMF C9 H10 O2



CM 4

CRN 108-31-6 CMF C4 H2 O3



REFERENCE COUNT:

19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 69 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 43

ACCESSION NUMBER:

2001:713843 HCAPLUS

DOCUMENT NUMBER:

135:264568

TITLE:

Photosensitive polymer including copolymer of alkyl

vinyl ether and resist composition

containing the same

INVENTOR(S):

Choi, Sang-jun; Kim, Hyun-woo

PATENT ASSIGNEE(S): SOURCE:

Samsung Electronics Co., Ltd., S. Korea U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U.S.

Ser. No. 576,053.

Sel. No. 370,03

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

3

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001024763	A1	20010927	US 2001-764150	20010119
US 6673513	B2	20040106		
KR 2001076138	Α	20010811	KR 2000-20603	20000419
US 6517990	B1	20030211	us 2000-576053	20000523
US 2003194643	A 1	20031016	US 2003-392931	20030321
US 6833230	B2	20041221		
US 2004137363	A1	20040715	US 2003-704977	20031112

PRIORITY APPLN. INFO.:

KR 2000-2489

KR 2000-20603

A 20000419

US 2000-198761P

US 2000-576053

A2 20000523

US 2001-764150

A2 20010119

IT 350992-45-9P

RL: POF (Polymer in formulation); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (synthesis of photosensitive copolymer of alkyl vinyl ether and maleic anhydride for resist composition)

KR 2002-34998

A 20020621

RN 350992-45-9 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylethyl ester, polymer with 3,4-dihydro-2H-pyran and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 154970-45-3 CMF C12 H18 O2

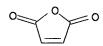
CM 2

CRN 110-87-2 CMF C5 H8 O



CM 3

CRN 108-31-6 CMF C4 H2 O3



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 70 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 44

ACCESSION NUMBER:

2001:534446 HCAPLUS

DOCUMENT NUMBER:

135:129569

TITLE:

Chemically amplified photoresist

compositions containing alkyl vinyl ether polymers for

ArF excimer laser exposure

INVENTOR(S):

Choi, Sang Joon; Kim, Hyun Woo

PATENT ASSIGNEE(S):

Samsung Electronics Co., Ltd., S. Korea

SOURCE:

Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001200016	A2	20010724	JP 2001-12171	20010119
KR 2001076138	Α	20010811	KR 2000-20603	20000419
EP 1120689	A2	20010801	EP 2001-300418	20010118
EP 1120689	A3	20010808		
R: AT, BE, CH,	DE, DK	, ES, GB, GR	, IT, LI, LU, NL, SE, M	C, PT, IE,
SI, LT, LV,	FI, RO			
PRIORITY APPLN. INFO.:	·		KR 2000-2489 A	20000119
			KR 2000-20603 A	20000419

IT 350992-45-9P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(chemical amplified **photoresists** containing alkyl vinyl ether polymers for ArF excimer laser exposure)

RN 350992-45-9 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylethyl ester, polymer with 3,4-dihydro-2H-pyran and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 154970-45-3 CMF C12 H18 O2

CM 2

CRN 110-87-2 CMF C5 H8 O



CM 3

CRN 108-31-6 CMF C4 H2 O3



L34 ANSWER 71 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 45

ACCESSION NUMBER:

2001:238005 HCAPLUS

DOCUMENT NUMBER:

134:287851

TITLE: Monomer for copolymer in deep UV-sensitive

resist composition for semiconductor device fabrication and method for preparation thereof

Chung, Min Ho; Chung, Jae Chang; Lee, Geun Soo; Paek, INVENTOR(S):

Hyundai Electronics Industries Co., Ltd., S. Korea; PATENT ASSIGNEE(S):

Hynix Semiconductor Co., Ltd.

Jpn. Kokai Tokkyo Koho, 34 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
JP 2001089539	A2	20010403	JP 2000-231613		20000731
JP 3515949	B2	20040405			
KR 2001011773	Α	20010215	KR 1999-31303		19990730
KR 2001011774	Α	20010215	KR 1999-31304		19990730
US 6426171	B1	20020730	US 2000-627714		20000728
PRIORITY APPLN. INFO.:			KR 1999-31303	Α	19990730
			KR 1999-31304	Α	19990730

OTHER SOURCE(S):

MARPAT 134:287851

TΤ 332138-97-3P

> RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(copolymer in deep UV-sensitive resist composition)

332138-97-3 HCAPLUS RN

Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, mono[2-(1-CN pyrrolidinyl)ethyl] ester, polymer with bicyclo[2.2.1]hept-5-ene-2carboxylic acid, 1,1-dimethylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate, 2,5-furandione and 2-hydroxyethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 332138-78-0 CMF C15 H21 N O4

2 CM

CRN 154970-45-3 C12 H18 O2 CMF

CM 3

37503-42-7 CRN

CRN 120-74-1 CMF C8 H10 O2



CM 5

CRN 108-31-6 CMF C4 H2 O3



L34 ANSWER 72 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 46

ACCESSION NUMBER:

2001:217905 HCAPLUS 134:259208

DOCUMENT NUMBER: TITLE:

Photosensitive polymer and resist

composition containing it

INVENTOR(S):

Choi, Sang Joon

PATENT ASSIGNEE(S):

Samsung Electronics Co., Ltd., S. Korea

SOURCE:

Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001081140	A2	20010327	JP 2000-231005	20000731
US 6270942	B1	20010807	US 2000-539138	20000330
PRIORITY APPLN. INFO.:			KR 1999-31059 A	19990729
TM 004440 45 05				

IT 331449-17-3P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(photoresist composition containing polymer with alicyclic backbone and photoacid generator)

RN 331449-17-3 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, bis(ethoxymethyl) ester, polymer with 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 331449-14-0

CRN 108-31-6 CMF C4 H2 O3

L34 ANSWER 73 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 47

ACCESSION NUMBER:

2001:796274 HCAPLUS

DOCUMENT NUMBER:

135:336914

TITLE:

Ester compounds, polymers, resist

compositions and patterning process

INVENTOR(S):

Hasegawa, Koji; Nishi, Tsunehiro; Kinsho, Takeshi;

Watanabe, Takeru; Nakashima, Mutsuo; Tachibana,

Seiichiro; Hatakeyama, Jun

PATENT ASSIGNEE(S):

Shin-Etsu Chemical Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 45 pp.

DOCUMENT TYPE:

CODEN: EPXXDW Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA1	PATENT NO.					Ò	DATE			APPLICATION NO.					DATE			
EP	1149	825			A2	-	2001	1031		EP	2001-	 -3038	 67			 20010	427	
EP	1149	825			A3	A3 20030326												
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	R, IT,	LI,	LU,	NL,	SE	, MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	, RO											
JP	2002	01262	22		A2		2002	0115		JP	2001-	1240	05			20010	423	
US	2002	00703	31		A1		2002	0117		US	2001-	8420	07			20010	426	
US	6531	627			B2		2003	0311										
US	2003	0881	15		A 1		2003	0508		US	2002-	-2885	14			20021	106	
US	6670	498			B2		2003	1230										
PRIORITY	APP	LN.	INFO	. :						JP	2000-	-1275	32		Α	20000	427	
										US	2001~	8420	07		А3	20010	426	
OTHER SO	OURCE	(S):			MARI	PAT	135:	3369	14									

IT 370089-04-6P

> RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of ester compound and polymers for photoresist compns. and patterning process)

370089-04-6 HCAPLUS RN

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 3-[(1-ethylcyclopentyl)oxy]-1-CN methyl-3-oxopropyl ester, polymer with 5-(2-bicyclo[2.2.1]hept-5-en-2ylethyl)dihydro-2(3H)-furanone (9CI) (CA INDEX NAME)

CM 1 CRN 370089-03-5 CMF C13 H18 O2

CM 2

CRN 370088-90-7 CMF C19 H28 O4

L34 ANSWER 74 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 48

ACCESSION NUMBER:

2001:631979 HCAPLUS

DOCUMENT NUMBER:

135:187722

TITLE:

Photoresist compositions comprising novel

copolymers

INVENTOR(S):

Barclay, George G.; Caporale, Stefan J.; Yueh, Wang;

Mao, Zhibiao; Mattia, Joseph

PATENT ASSIGNEE(S):

Shipley Company L.L.C., USA

SOURCE:

Eur. Pat. Appl., 21 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	KIN	D	DATE			\P P	LICAT	D	DATE									
	EP	1128	213			A2		2001	0829	E	EP	2001-	3016	13		2	0010	222
	EP	1128	213			A3		2003	1119							,		
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	R, IT,	LI,	LU,	NL,	SE,	MC,	PT,
			IE,	SI,	LT,	ĽV,	FI,	, RO		•								
	US	6777	157			В1		2004	0817	τ	JS	2000-	5678	14		2	0000	509
	TW	5847	81			В		2004	0421	r	W	2001-	9010	4232		2	0010	223
	JP	2001	2966	63		A2		2001	1026	J	ſΡ	2001-	5068	1		2	0010	226
	US	2003	2157	42		A 1		2003	1120	τ	JS	2003-	4085	22		2	0030	407
	US	6849	381			В2		2005	0201									
PRIO	RIT	APP	LN.	INFO	.:					τ	JS	2000-	1853	45P		P 2	0000	226
										τ	JS	2000-	5678	14		A 2	0000	509
TM	0.51			_														

IT 355395-09-4P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(photoresist composition containing photoacid labile acrylate and cyclic olefin)

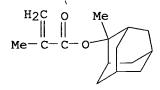
RN 355395-09-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.13,7]dec-2-yl ester,
 polymer with bicyclo[2.2.1]hept-2-ene, α cyclopentylbicyclo[2.2.1]hept-2-ene-2-methanol and 2,5-furandione (9CI)
 (CA INDEX NAME)

CM 1

CRN 355395-08-3 CMF C13 H20 O

CRN 177080-67-0 C15 H22 O2



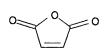
CM 3

CRN 498-66-8 CMF C7 H10



CM

CRN 108-31-6 CMF C4 H2 O3



L34 ANSWER 75 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 49

ACCESSION NUMBER:

2001:208018 HCAPLUS

DOCUMENT NUMBER:

134:259202

TITLE:

Resist compositions comprising sulfonium

photoacid generator for ArF excimer laser lithography

and patterning process

INVENTOR(S):

Nishi, Tsunehiro; Ohsawa, Youichi; Hatakeyama, Jun

Shin-Etsu Chemical Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 36 pp.

DOCUMENT TYPE:

CODEN: EPXXDW

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO. KIND DATE APPLICATION NO. DATE EP 1085377 A1 20010321 EP 2000-307915 20000913 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2001083695 A2 20010330 JP 1999-263257 19990917

US 6420085 B1 20020716 US 2000-663830 20000915
PRIORITY APPLN. INFO.: JP 1999-263257 A 19990917

OTHER SOURCE(S): MARPAT 134:259202

IT 330596-00-4

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(resist compns. comprising sulfonium photoacid generator and copolymers for ArF laser lithog. and patterning process)

RN 330596-00-4 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1-ethylcyclopentyl ester, polymer with 1-ethylcyclopentyl 2-methyl-2-propenoate and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 279243-69-5 CMF C15 H22 O2

CM 2

CRN 266308-58-1 CMF C11 H18 O2

CM 3

CRN 108-31-6 CMF C4 H2 O3

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 76 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 50

ACCESSION NUMBER:

2001:150535 HCAPLUS

DOCUMENT NUMBER:

134:200535

TITLE:

Crosslinking monomer containing double bond and

photoresist copolymer containing the same

INVENTOR(S):

Lee, Geun Su; Jung, Jae Chang; Baik, Ki Ho

PATENT ASSIGNEE(S): Hyundai Electronics Industries Co., Ltd., Ichon, S.

Korea

Ger. Offen., 16 pp. SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent German

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
DE 10040963	A 1	20010301	DE 2000-10040963		20000822
KR 2001018905	Α	20010315	KR 1999-35046		19990823
GB 2354004	A 1	20010314	GB 2000-19436		20000809
GB 2354004	B2	20040114			
JP 2001106737	A2	20010417	JP 2000-252762		20000823
PRIORITY APPLN. INFO.:			KR 1999-35046	Α	19990823

328068-00-4P, Mono-2-ethyl-2-(hydroxymethyl)-butylbicyclo-[2.2.1]-IT hept-5-ene-2,3-dicarboxylate-maleic acid anhydride-norbornene-tertbutylbicyclo-[2.2.1]-hept-5-ene-2-carboxylate-2,5-hexanediol diacrylate copolymer

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of **photoresist** copolymer containing crosslinking monomer with double bond)

328068-00-4 HCAPLUS RN

CN Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, mono[2-ethyl-2-(hydroxymethyl)butyl] ester, polymer with bicyclo[2.2.1]hept-2-ene, 1,4-dimethyl-1,4-butanediyl di-2-propenoate, 1,1-dimethylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 250583-69-8 CMF C16 H24 O5

CM 2

CRN 154970-45-3 CMF C12 H18 O2

3 CM

CRN 85996-28-7 CMF C12 H18 O4

CRN 498-66-8 C7 H10 CMF



5 CM

CRN 108-31-6 CMF C4 H2 O3



L34 ANSWER 77 OF 86 USPATFULL on STN

2001:214807 USPATFULL ACCESSION NUMBER:

Photoresist cross-linker and TITLE:

photoresist composition comprising the same

Jung, Jae Chang, Kyoungki-do, Korea, Republic of INVENTOR(S):

Kong, Keun Kyu, Kwangju, Korea, Republic of

Kim, Jin Soo, Daejeon, Korea, Republic of Baik, Ki Ho, Kyoungki-do, Korea, Republic of

Hyundai Electronics Industries Co., Ltd., Korea, PATENT ASSIGNEE(S):

Republic of (non-U.S. corporation)

		NUMBER	KIND	DATE	
PATENT INFORMATION:	US	6322948	B1	20011127	
APPLICATION INFO.:	US	2000-499231		20000207	(9)

DATE NUMBER 19990210 PRIORITY INFORMATION: KR 1999-4593

DOCUMENT TYPE: Utility

GRANTED FILE SEGMENT:

PRIMARY EXAMINER: Ashton, Rosemary

Townsend and Townsend and Crew LLP LEGAL REPRESENTATIVE:

10 NUMBER OF CLAIMS: 1

EXEMPLARY CLAIM: 10 Drawing Figure(s); 5 Drawing Page(s) NUMBER OF DRAWINGS:

555 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 288619-55-6P

(crosslinking agent; norbornene derivative polymers as crosslinking agents for photoresists and their use in semiconductor device fabrication)

RN 288619-55-6 USPATFULL

2-Propenoic acid, polymer with 5-(dimethoxymethyl)bicyclo[2.2.1]hept-2-ene CN

and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 69448-18-6 CMF C10 H16 O2

CM 2

CRN 108-31-6 CMF C4 H2 O3

CM 3

CRN 79-10-7 CMF C3 H4 O2

L34 ANSWER 78 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2001:179213 USPATFULL

TITLE: Polycyclic copolymer compositions

INVENTOR(S): Goodall, Brian Leslie, Baton Rouge, LA, United States

McIntosh, III, Lester Howard, Cuyahoga Falls, OH,

United States

PATENT ASSIGNEE(S): The B. F. Goodrich Company, Brecksville, OH, United

States (U.S. corporation)

NUMBER	KIND	DATE	
 5 6303724 S 1999-345286	B1	20011016 19990630	(9)

NUMBER DATE

PRIORITY INFORMATION: US 1998-91361P 19980701 (60) DOCUMENT TYPE: Utility

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Wu, David W.
ASSISTANT EXAMINER: Cheung, William

LEGAL REPRESENTATIVE: Dunlap, Thoburn T. Hudak & Shunk Co., L.P.A.

NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)

LINE COUNT: 1296

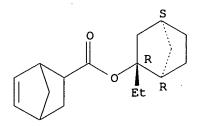
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
(polycyclic copolymer compns.)
    254751-22-9 USPATFULL
RN
    2-Propenoic acid, methyl ester, polymer with 5-butylbicyclo[2.2.1]hept-2-
CN
       ene (9CI) (CA INDEX NAME)
    CM
         1
    CRN 22094-81-1
    CMF C11 H18
       Bu-n
         2
    CM
    CRN 96-33-3
    CMF C4 H6 O2
MeO-C-CH-CH2
L34 ANSWER 79 OF 86 USPATFULL on STN
                       2001:147641 USPATFULL
ACCESSION NUMBER:
                       Ester compounds, polymers, resist
TITLE:
                       compositions and patterning process
                       Kinsho, Takeshi, Nakakubiki-gun, Japan
INVENTOR(S):
                       Nishi, Tsunehiro, Nakakubiki-gun, Japan
                       Kurihara, Hideshi, Usui-gun, Japan
                       Nakashima, Mutsuo, Nakakubiki-gun, Japan
                       Hasegawa, Koji, Nakakubiki-gun, Japan
                       Watanabe, Takeru, Nakakubiki-gun, Japan
PATENT ASSIGNEE(S):
                       Shin-Etsu Chemical Co., Ltd., Tokyo, Japan (non-U.S.
                       corporation)
                                        KIND DATE
                            NUMBER
                       US 6284429
                                        B1
                                               20010904
PATENT INFORMATION:
                       US 2000-512108
                                               20000224 (9)
APPLICATION INFO.:
                              NUMBER DATE
                       JP 1999-47406
PRIORITY INFORMATION:
                                          19990225
                       JP 1999-174945
                                          19990622
DOCUMENT TYPE:
                       Utility
FILE SEGMENT:
                       GRANTED
PRIMARY EXAMINER:
                       Ashton, Rosemary E.
                       Millen, White, Zelano & Branigan, P.C
LEGAL REPRESENTATIVE:
                       19
NUMBER OF CLAIMS:
EXEMPLARY CLAIM:
                       1
                       2016
LINE COUNT:
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 290809-04-0P
        (novel ester compds., polymers, resist compns. and patterning process)
RN
     290809-04-0 USPATFULL
     Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, (1R,2R,4S)-2-
CN
       ethylbicyclo[2.2.1]hept-2-yl ester, rel-, polymer with
       rel-(3aR, 4S, 5R, 7S, 7aR)-5-ethyloctahydro-4, 7-methano-1H-inden-5-yl
       2-methyl-2-propenoate and 2,5-furandione (9CI) (CA INDEX NAME)
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254751-22-9P

CRN 290808-30-9 CMF C17 H24 O2

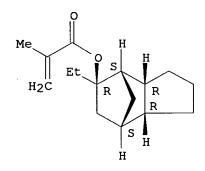
Relative stereochemistry.



CM 2

CRN 271598-65-3 CMF C16 H24 O2

Relative stereochemistry.



CM 3

CRN 108-31-6 CMF C4 H2 O3

L34 ANSWER 80 OF 86 USPATFULL on STN

ACCESSION NUMBER:

2001:125716 USPATFULL

TITLE:

Photosensitive polymer having cyclic backbone and

resist composition comprising the same

INVENTOR(S):

19990729

Choi, Sang-jun, Seoul, Korea, Republic of Samsung Electronics Co., LTD, Korea, Republic of PATENT ASSIGNEE(S):

(non-U.S. corporation)

NUMBER KIND DATE _____ US 6270942 PATENT INFORMATION: В1 20010807 APPLICATION INFO.: US 2000-539138 20000330 (9)

> NUMBER DATE

PRIORITY INFORMATION: KR 1999-31059 DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Ashton, Rosemary E. LEGAL REPRESENTATIVE: Mills & Onello LLP

NUMBER OF CLAIMS: 11 EXEMPLARY CLAIM: 4 LINE COUNT: 497

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 331449-17-3P

(photoresist composition containing polymer with alicyclic backbone and photoacid generator)

RN 331449-17-3 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, bis(ethoxymethyl) ester, polymer with 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 331449-14-0 CMF C15 H22 O6

CM 2

CRN 108-31-6 CMF C4 H2 O3

L34 ANSWER 81 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 51

ACCESSION NUMBER: 2000:210534 HCAPLUS

DOCUMENT NUMBER: 132:258158.

TITLE: Photoresist for microlithography

INVENTOR(S): Feiring, Andrew Edward; Feldman, Jerald PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE			i	APPL:	DATE						
				,		_			•								
WO	2000	0177	12		A 1		2000	0330	1	WO 1	999-1	US21:	912		19990921		
	W:	ΑE,	AL,	AU,	BA,	BB,	BG,	BR,	CA,	CN,	CR,	CU,	CZ,	EE,	GD,	GE,	HR,
		HU,	ID,	IL,	IN,	IS,	JP,	KP,	KR,	LC,	LK,	LR,	LT,	LV,	MG,	MK,	MN,
		MX,	NO,	NZ,	PL,	RO,	SG,	SI,	SK,	SL,	TR,	TT,	UA,	US,	UZ,	VN,	YU,
		ZA,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM						
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,
		DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG				
AU 9960560				A 1		2000	0410		AU 1	999-	6056	0		1	9990	921	

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EP 1131677
                                  20010912
                                              EP 1999-969504
                                                                      19990921
                            A1
              AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
                                              JP 2000-571312
                                                                      19990921
      JP 2002525683
                                  20020813
                            Т2
                                              US 2001-806096
                                                                      20010323
      US 6593058
                            В1
                                  20030715
                                              US 2002-108935
      US 2004023150
                                  20040205
                                                                      20020327
                            A1
      US 6849377
                            B2
                                  20050201
      US 2004023152
                            A1
                                  20040205
                                              US 2003-437760
                                                                      20030514
PRIORITY APPLN. INFO.:
                                              US 1998-101502P
                                                                   Ρ
                                                                      19980923
                                              US 1999-120045P
                                                                   Ρ
                                                                      19990212
                                                                      19990921
                                              WO 1999-US21912
                                                                   W
                                              US 2001-806096
                                                                   A2 20010323
                                              US 2001-280268P
                                                                   P
                                                                      20010330
      262617-09-4P, Norbornene-5-norbornene-2-carboxylic
 IT
      acid-tetrafluoroethylene copolymer
      RL: SPN (Synthetic preparation); TEM (Technical or engineered material
      use); PREP (Preparation); USES (Uses)
         (preparation and use in preparing UV photoresists for microlithog.)
```

RN 262617-09-4 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, polymer with

bicyclo[2.2.1]hept-2-ene and tetrafluoroethene (9CI) (CA INDEX NAME)

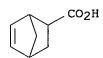
CM 1

CRN 498-66-8 CMF C7 H10



CM 2

CRN 120-74-1 CMF C8 H10 O2



CM 3

CRN 116-14-3 CMF C2 F4

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 82 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 52

ACCESSION NUMBER: 20

2000:34921 HCAPLUS

DOCUMENT NUMBER:

132:93814

TITLE:

Polycyclic copolymer compositions

INVENTOR(S):

Goodall, Brian L.; McIntosh, Lester H., III

PATENT ASSIGNEE(S): The B.F. Goodrich Company, USA

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.						KIND DATE			APPLICATION NO.							DATE			
	WO	2000	0017	47		A1	_	2000	0113							19990618			
		W:	AL,	AM,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CN,	CZ,	EE,	GE,	HU,	ID,	
			IL,	IS,	JP,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LV,	MD,	MG,	MK,	
			MN,	MW,	MX,	NO,	NZ,	PL,	RO,	RU,	SD,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	
			TT,	UA,	UG,	UZ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM	
		RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,	DK,	
			ËS,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	
			CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG						
	AU	9948	263			A 1		2000	0124		AU 1	999-	4826	3		1	9990	618	
	EP	1093	480			A 1		2001	0425		EP 1	999-	9318	41	•	19990618			
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	FΙ															
	JP	2002	5194	87		Т2		2002	0702		JP 2	000-	5581	45		1	9990	618	
	US	6303	724			В1		2001	1016	1	US 1	999-	3452	86		1	9990	630	
PRIC	PRIORITY APPLN. INFO.:				.:							998-							
										1	WO 1	999-1	US13	903	Ī	W 1	9990	618	

IT 254751-22-9P

RL: IMF (Industrial manufacture); PREP (Preparation) (polycyclic copolymer compns.)

RN 254751-22-9 HCAPLUS

CN 2-Propenoic acid, methyl ester, polymer with 5-butylbicyclo[2.2.1]hept-2-ene (9CI) (CA INDEX NAME)

CM 1

CRN 22094-81-1 CMF C11 H18

CM 2

CRN 96-33-3 CMF C4 H6 O2

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 83 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 53

ACCESSION NUMBER:

2000:587079 HCAPLUS

DOCUMENT NUMBER:

133:185543

TITLE:

Monomers for photoresist crosslinking agents, photoresist crosslinking agents, photoresist compositions, patterning of photoresist compositions, and semiconductor devices

Chung, Jae Chang; Kong, Geun Kyu; Kim, Jin Soo; Paek, INVENTOR(S):

Hyundai Electronics Industries Co., Ltd., S. Korea PATENT ASSIGNEE(S):

Jpn. Kokai Tokkyo Koho, 27 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		-		
JP 2000231191	A2	20000822	JP 2000-32228	20000209
KR 2000055772	Α	20000915	KR 1999-4593	19990210
TW 528929	В	20030421	TW 2000-89101778	20000202
US 6322948	B1	20011127	US 2000-499231	20000207
PRIORITY APPLN. INFO.:			KR 1999-4593 A	19990210
OTHER SOURCE(S):	MARPAT	133:185543		

288619-55-6P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process); USES (Uses)

(crosslinking agent; norbornene derivative polymers as crosslinking agents for photoresists and their use in semiconductor device fabrication)

RN288619-55-6 HCAPLUS

CN 2-Propenoic acid, polymer with 5-(dimethoxymethyl)bicyclo[2.2.1]hept-2-ene and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 69448-18-6 CMF C10 H16 O2

2 CM

CRN 108-31-6 CMF C4 H2 O3

CM 3

CRN 79-10-7 CMF C3 H4 O2

HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 54 L34 ANSWER 84 OF 86

ACCESSION NUMBER:

2000:608477 HCAPLUS

DOCUMENT NUMBER:

133:215453

TITLE:

Novel ester compounds, polymers, resist

compositions and patterning process

INVENTOR(S):

Kinsho, Takeshi; Nishi, Tsunehiro; Kurihara, Hideshi; Nakashima, Mutsuo; Hasegawa, Koji; Watanabe, Takeru

PATENT ASSIGNEE(S):

Shin-Etsu Chemical Co., Ltd., Japan

Eur. Pat. Appl., 71 pp.

SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PA'	CENT	NO.			KIND DATE			Ī	APP	LICAT	DATE						
							_			-						_		-
	ΕP	1031	879			A 1		2000	0830	1	EΡ	2000-301523 20000						
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO										
	JР	2000	3096	11		A2		2000	1107	į.	JP	1999-	1749	45		1	9990	622
	KR	2000	0581	67		Α		2000	0925	1	KR	2000-	8963			2	0000	224
	US	6284	429			В1		2001	0904	τ	JS	2000-	5121	80		2	0000	224
PRIOR	RIT	APP	LN.	INFO	. :						JΡ	1999-	4740	6	1	A 1	9990	225
											TD	1999-	1749	45	7	Δ 1	agan	622

IT 290809-04-0P

RL: POF (Polymer in formulation); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (novel ester compds., polymers, resist compns. and patterning process)

290809-04-0 HCAPLUS RN

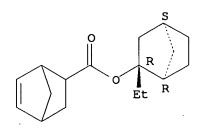
Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, (1R,2R,4S)-2-CN ethylbicyclo[2.2.1]hept-2-yl ester, rel-, polymer with rel-(3aR, 4S, 5R, 7S, 7aR)-5-ethyloctahydro-4,7-methano-1H-inden-5-yl

2-methyl-2-propenoate and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

290808-30-9 CRN C17 H24 O2

Relative stereochemistry.



CM

CRN 271598-65-3 CMF C16 H24 O2

Relative stereochemistry.

CRN 108-31-6 CMF C4 H2 O3

REFERENCE COUNT:

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 85 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 55

ACCESSION NUMBER:

2000:157963 HCAPLUS 132:201051

DOCUMENT NUMBER: TITLE:

New photoresist-monomer with hydroxy groups

and carboxyl groups, copolymer and photoresist

composition using the same

INVENTOR(S):

Lee, Geun Su; Koh, Cha Won; Jung, Jae Chang; Jung, Min

Ho; Baik, Ki Ho

PATENT ASSIGNEE(S):

Hyundai Electronics Industries Co., Ltd., Ichon, S.

Korea

SOURCE:

Ger. Offen., 28 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19940516	A1	20000309	DE 1999-19940516	19990826
KR 2000015013	A	20000315	KR 1998-34694	19980826
KR 2000020467	A	20000415	KR 1998-39079	19980921
JP 2000086726	A2	20000328	JP 1999-238931	19990825
JP 3587743	B2	20041110		
NL 1012916	A1	20000229	NL 1999-1012916	19990826
NL 1012916	C2	20021203		
GB 2340831	A 1	20000301	GB 1999-20124	19990826
GB 2340831	B2	20040512		
FR 2782715	A 1	20000303	FR 1999-10819	19990826
FR 2782715	B1	20040910		
CN 1247858	Α	20000322	CN 1999-118357	19990826
IT 1307051	B1	20011023	IT 1999-TO725	19990826
US 6410670	B1	20020625	US 1999-383861	19990826
TW 535033	В	20030601	TW 1999-88114597	19990826
US 2002091216	A 1	20020711	US 2002-79753	20020219
US 6586619	B2	20030701		
PRIORITY APPLN. INFO.:			KR 1998-34694	A 19980826
			KR 1998-39079	A 19980921
			US 1999-383861	A3 19990826

OTHER SOURCE(S):

MARPAT 132:201051

IT 260065-43-8P

RL: SPN (Synthetic preparation); TEM (Technical or engineered materialuse); PREP (Preparation); USES (Uses)

(preparation of **photoresist** copolymer using new

photoresist-monomer for photoresist composition with

submicron resolution)

RN 260065-43-8 HCAPLUS

7-Oxabicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, mono(5-hydroxypentyl) ester, polymer with bicyclo[2.2.1]hept-2-ene, 1,1-dimethylethyl hydrogen bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylate and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CN

CRN 260065-28-9 CMF C13 H18 O6

CM 2

CRN 76198-01-1 CMF C13 H18 O4

CM 3

CRN 498-66-8 CMF C7 H10



CM 4

CRN 108-31-6 CMF C4 H2 O3

L34 ANSWER 86 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 56

ACCESSION NUMBER: 1999:549311 HCAPLUS

DOCUMENT NUMBER:

INVENTOR(S):

131:170800

TITLE:

Modified polymers having polycyclic side chains

Jayaraman, Saikumar; Benedikt, George M.; Rhodes,

Larry F.; Vicari, Richard; Allen, Robert D.; Dipietro, Richard A.; Sooriyakumaran, Ratnam; Wallow, Thomas

The B.F. Goodrich Company, USA

PATENT ASSIGNEE(S): SOURCE:

LANGUAGE:

PCT Int. Appl., 84 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

English

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT	NO.			KIND DATE			APPLICATION NO.							DATE			
WO	9942	510			A1	_	1999	0826		wo	199	9-t	JS37	71		1	9990	219
	W:	AL,	AM,	AU,	AZ,	BA,	BB,	BG,	BR,	BY	, c	Ά,	CN,	CZ,	EE,	GE,	HU,	ID,
																	MG,	
		MN,	MW,	MX,	NO,	NZ,	PL,	RO,	RU,	SD	, S	G,	SI,	SK,	SL,	ТJ,	TM,	TR,
		TT,	UA,	ŪG,	UZ,	VN,	YU,	ZW,	AM,	ΑZ	, B	βY,	KG,	ΚZ,	MD,	RU,	TJ,	TM
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ZW	, A	T,	BE,	CH,	CY,	DE,	DK,	ES,
		FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL	, P	T,	SE,	BF,	ВJ,	CF,	CG,	CI,
		CM,					MR,											
AU	9928	724			A 1		1999	0906		AU	199	9-2	2872	4		1	9990	219
EP	EP 1060206				A 1		2000	1220		ΕP	199	9-9	9095	41		1	9990	219
EP	1060	206			B1		2004	0414										
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, I	Τ,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	FI															
JP	2002	5045	77		Т2		2002	0212		JP	200	0-5	5324	61		1	9990	219
US	6451	945			В1		2002	0917		US	199	9-2	2534	99		1	19990	219
AT	2643	52			E		2004	0415		AΤ	199	9-9	9095	41		1	19990	219
TW	5655	75			В		2003	1211		TW	199	9-8	3810	2555		1	L9990	407
US	2003	0181	53		A 1		2003	0123		US	200	2-2	2249	94		2	20020	821
US	6794	459			В2		2004	0921										
PRIORIT	Y APP	LN.	INFO	.:						US	199	8-	7555	8 P		P 1	19980	223
										US	199	9-2	2534	99		A3 1	19990	219
										WO	199	9-t	JS37	71	1	W 1	19990	219

IT **239137-09-8DP**, hydrolyzed

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(modified polymers having polycyclic side chains for

photoresists with improved hydrophilicity)

RN 239137-09-8 HCAPLUS

CN 1,4:5,8-Dimethanonaphthalene-2-carboxylic acid, 1,2,3,4,4a,5,8,8a-octahydro-, ethyl ester, polymer with 1,1-dimethylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate, ethyl (3-methylbicyclo[2.2.1]hept-5-en-2-yl)methyl carbonate and trimethylsilyl bicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 239137-00-9 CMF C12 H18 O3

CRN 154970-45-3 CMF C12 H18 O2

CM 3

CRN 61615-20-1 CMF C15 H20 O2

CM 4

CRN 56151-01-0 CMF C11 H18 O2 Si

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 12:14:41 ON 07 MAR 2005)

FILE 'REGISTRY' ENTERED AT 12:15:00 ON 07 MAR 2005 SCREEN 2067 L1L2 STRUCTURE UPLOADED L3 QUE L2 AND L1 0 S L3 SSS SAM L4L5 SCREEN 2067 L6 STRUCTURE UPLOADED L7 QUE L6 AND L5 Г8 0 S L7 SSS SAM L9 SCREEN 2067 L10 STRUCTURE UPLOADED QUE L10 AND L9 L11 50 S L11 SSS SAM L12

SCREEN 2067

STRUCTURE UPLOADED

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     FILE 'HCAPLUS, CAPLUS, USPATFULL' ENTERED AT 12:22:28 ON 07 MAR 2005
           233 S L4 OR L8 OR L12 OR L16 OR L26 OR L30
L31
         454502 S PHOTORESIST OR RESIST
L32
           148 S L31 AND L32
L33
            86 DUPLICATE REMOVE L33 (62 DUPLICATES REMOVED)
L34
=> s 14
             0 L4
L35
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L36
             0 L8
=> s 112
           210 L12
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L37 ANSWER 1 OF 210 HCAPLUS COPYRIGHT 2005 ACS on STN
    2005:123212 HCAPLUS
AN
DN
     142:198529
    Low polydispersity resin and preparation thereof using chain-transfer
ΤI
     Lee, Ting-Yu; Yu, Choa-Ying; Hsu, Meei-Yu; Wang, Shian-Jy; Ting, Ching;
IN
     Shih, Kuo-Chen
PA
     Taiwan
SO
     U.S. Pat. Appl. Publ., 13 pp.
     CODEN: USXXCO
DT
    Patent
    English
LΑ
FAN.CNT 1
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                                                                   DATE
                        KIND
                                DATE
     PATENT NO.
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    US 2005032997
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                                           US 2003-714052
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